

JANUARY, 1958

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2150 Kc.	5530 Kc.	6250 Kc.	6850 Kc.	7175 Kc.
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2442.5 Kc.	5655.333 Kc.	6300 Kc.	6900 Kc.	7225 Kc.
2443 Kc.	5700 Kc.	6325 Kc.	6925 Kc.	7250 Kc.
2732 Kc.	5722.222 Kc.	6350 Kc.	6950 Kc.	7275 Kc.
2770 Kc.	5725 Kc.	6375 Kc.	6975 Kc.	7300 Kc.
2979 Kc.	5744 Kc.	6400 Kc.	7000 Kc.	7325 Kc.
2990 Kc.	5750 Kc.	6425 Kc.	7002.5 Kc.	7350 Kc.
3280 Kc.	5775 Kc.	6450 Kc.	7003 Kc.	7375 Kc.
3500 Kc.	5825 Kc.	6475 Kc.	7005 Kc.	7400 Kc.
3533 Kc.	5850 Kc.	6497.9 Kc.	7010 Kc.	7425 Kc.
3535 Kc.	5852.5 Kc.	6500 Kc.	7011.75 Kc.	7450 Kc.
3537 Kc.	5875 Kc.	6522.9 Kc.	7012 Kc.	7475 Kc.
3892 Kc.	5900 Kc.	6525 Kc.	7018 Kc.	7500 Kc.
3925 Kc.	5925 Kc.	6547.9 Kc.	7021.7 Kc.	7525 Kc.
4096 Kc.	5950 Kc.	6550 Kc.	7025 Kc.	7550 Kc.
4172 Kc.	5975 Kc.	6561.111 Kc.	7032 Kc.	7575 Kc.
4205 Kc.	6000 Kc.	6575 Kc.	7032.6 Kc.	7600 Kc.
4285 Kc.	6025 Kc.	6600 Kc.	7050 Kc.	7625 Kc.
4405 Kc.	6050 Kc.	6625 Kc.	7075 Kc.	7650 Kc.
4445 Kc.	6075 Kc.	6650 Kc.	7100 Kc.	7675 Kc.
4600 Kc.	6083.3 Kc.	6675 Kc.	7125 Kc.	7700 Kc.
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All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official Broadcasts.

VK2WI: Sundays, 1100 hours EST, 7146 Kc.; 1930 hours EST, 144 Mc. No frequency checks available from VK2WI. Intra-state working frequency, 7050 Kc.

VK3WI: Sundays, 1130 hours EST, simultaneous on 3573 and 7146 Kc., 57.5 and 146.25 Mc. Intra-state working frequency 7155 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI: Sundays, 0900 hours EST, simultaneous on 3560 and 14342 Kc., W.I.A. Country Hook Sunday mornings 0900 hours. Please call VK4ZM on 20 mx, and VK4WI on 40 mx. Sunday night re-broadcast of the news on 80 mx at 2100 hours, conducted by VK4WI.

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VK7WI: Sundays at 1000 hours EST, on 7146 Kc. and 2672 Kc. No frequency checks are available.

VK9WI: Sundays, 1000 hours EST, simultaneously on 3.5, 7, 14 and 144 Mc. bands. Individual frequency checks of Amateur Stations given when VK9WI is on the air.

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EDITORIAL



INTERNATIONAL CONFERENCE

At the commencement of a New Year it is usual to consider plans for the future after having viewed the past in retrospect. Such inspection will inevitably result in steering a future course to avoid the pitfalls of the past. The Institute is no exception on this theme and believes it is always possible to improve on past performances.

A case in point was representation at the 1947 Atlantic City Conference when some ground was lost. There the Amateur had little say—in fact, he only obtained official recognition there and became part of the Amateur Service, a just reward for years of usefulness to the community at large. Although this gain in status gave the Amateur more weight throughout the world, other communication interests have become stronger and more demanding in the interim to offset this initial advantage.

It is quite obvious that the Amateur voice raised at the next Conference must be "loud and clear"—it must be a united voice and not one spoken through Government proxies who have so many other interests to defend. There are several preparatory steps which must be taken before even a delegate can proceed. The first is Government accreditation, the second is a clear and concise brief of Amateur requirements to the official delegate for Australia, and the next is parallel purpose with other Amateur delegates from overseas societies. When actually at the Conference, the Amateur representative must keep a close watching brief on matters affecting him and be in a position to

answer queries or give advice to the official Government delegates.

A "loose man" (the Amateur representative) could be very usefully employed in the communications "field" at the Conference. He would be in a position to listen in to many of the plenary and technical discussions that may preclude an official delegate because of other duties. He could thus become a beneficial adjunct to the Australian delegation as a whole on all matters which concern them.

The first two points raised above will be important matters your Executive have as priority tasks for this year. The Federal Secretary is later this year going overseas on a world tour, and it is his intention to hold discussions with the larger overseas societies on all the aspects of co-ordination of requirements and a unanimity of effort by those attending.

The important matter of whether to send an Amateur delegate or not is left to you, the members. It does not appear easy to find the necessary £1,500 to £2,000 for a delegate, but when this amount is spread over 3,000 odd Amateurs it does not look nearly so formidable.

You can see that the preliminary steps are in hand to see that your interests are guarded and properly represented, but this cannot be brought to fruition without your help. At the appropriate time, the Divisions will be asked for their support—can you afford NOT to support your Division and your hobby and the whole future of the Amateur in Australia?

FEDERAL EXECUTIVE

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Harmonics and Selectivity of Transmitters

PART TWO

BY HANS RUCKERT,* VK2AOU

SELECTIVITY OF TUNED CIRCUITS

WITH DIFFERENT Q VALUES

John L. Reinartz published some interesting figures giving us the attenuation of harmonics achieved with a single tuned circuit and with two coupled circuits depending upon the Q. The ratio figures are in db. comparing the power of the harmonic with that of the fundamental. Each 10 db. represents an attenuation of the harmonic to one-tenth. Minus 40 db. is, therefore, equal to one-ten thousandth of the power level and is the same as a voltage ratio or a current ratio of one-hundredth. In other words, if the fundamental was 100 volts of r.f., the harmonic would now be 1 volt. We see that we have a long way to go before the harmonics are down to microvolt strength.

Q	2nd Harm.	3rd Harm.	4th Harm.
For a single tuned circuit—			
5	-23.5	-32.0	-37.5
10	-29.6	-38.1	-43.5
15	-33.0	-41.6	-47.0
20	-35.6	-44.1	-49.6

For two coupled tuned circuits—			
5	-38.2	-54.4	-76.8
10	-50.2	-67.4	-88.8
15	-57.3	-75.1	-98.2
20	-62.3	-79.4	-100.8

These figures show us clearly that a tank circuit alone has no chance. If we do not couple very tightly, an antenna coupler will help a good deal (compare values in two tuned coupled circuits above). The same author mentions some interesting calculations. Up to a distance of 650 feet, the field strength of a horizontal dipole can be calculated as:

$$E \text{ (volts/metre)} = \sqrt{P} \div d$$

where P = power in watts
 d = distance in feet.

Or the power in microwatts is:

$$P = 1880 (E \times d)^2$$

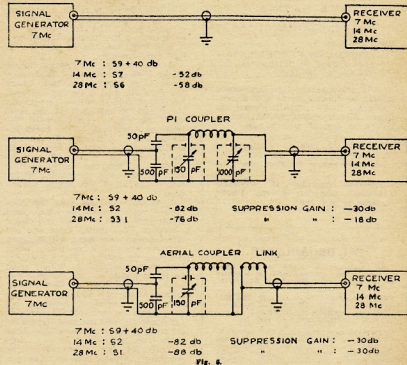
The minimum picture carrier field strength for a good picture is 500 $\mu\text{V/m}$. On the picture carrier we can only tolerate an interfering signal if it has a field strength of 1/100 or 5 $\mu\text{V/m}$. With the above mentioned formula we arrive at 0.012 μWatt for the interfering signal. This means that with a transmitter of 100 watts fundamental power, we need about -100 db. power reduction for the harmonics, which is a power ratio of 10^{-10} , or 1/10,000,000,000 if the distance between the transmitter and the receiver is 500 feet. Your neighbour's t.v. antenna may be only 50 feet from your beam. Fortunately the case is seldom so bad because our harmonics may not fall on the picture carrier frequency. If the harmonic is about three megacycles away from the carrier and outside of the receiver pass-band, we may get away with 100 times stronger interfering signal.

IS THE PI-COUPLER THE ANSWER?

On page 63 of February '56 "QST" we read: "Checking of harmonics at output important. One of the simplest ways to invite an F.C.C. citation is to assume that any new rig with a pi-coupler is absolutely foolproof on the A.R.R.L. Official Observer. The 7.6 to 8 Mc. (7.15 to 7.6 Mc. in VK) range is much more filled with harmonic emissions than ever in the past."

U.S. manufacturers build pi-network tank circuits in their transmitters to make bandswitching of shielded transmitters easy and to allow various antennae to be used. Also low-pass filters can easily be connected in this

A pi-coupler was then placed between the generator and the receiver (Fig. 5, centre). A matching voltage set-up capacitor chain had to be used on the generator side. This has nothing to do with selectivity provided by the pi-coupler. The two pi-coupler capacitors were fully shielded and had air dielectric. Care was taken so that practically no signal could get around the pi-coupler. We were disappointed. The second harmonic was only attenuated 30 db. and the 4th harmonic only 18 db. Nothing was changed on the generator or receiver, the additional attenuation being read on the calibrated S meter to reduce the chance of error.



case. The advertising claim is "i.v.i. suppressed" and not i.v.i. proof!

Test.—The writer was very interested to see just how good a pi-coupler is in regard to harmonic suppression. We suspected that many of the authors of book and magazine articles who recommend the pi-coupler as "the shot" against the radiation of harmonics may not have actually tested it fully.

A signal generator was tuned to 7 Mc. and a 10 mV. output was selected to ensure that some harmonics could be detected from the generator. A coaxial cable was directly connected to a well shielded highly selective double conversion receiver. Fig. 5 (top) shows the set-up. The 14 and 28 Mc. harmonics were compared with the S9 plus 40 db. signal on the 7 Mc. fundamental.

Fig. 5 (lower) gives the result of the last test, where the pi-coupler was replaced by an ordinary antenna coupler with a link to the receiver. Although this test was repeated several times, the result was always the same—the 2nd and 4th harmonics were both down -30 db. Connecting the receiver link direct to a tap on the coupler coil resulted in a lower attenuation than with the pi-coupler.

After this, the pi-coupler does not seem to be "too hot!" Theoretically, the pi-coupler looks like a low-pass filter, but at these frequencies we cannot say that a 0.001 μF (1,000 pF) capacitor with leads and rotor contacts is free of inductance and so we do not get

* 28 Berrille Road, Beverly Hills, N.S.W.

the full benefit of a large by-pass capacitor across the output.

It appears that the inductively coupled link is a better separating method. The difference is not so serious that we must condemn the pi-coupler and go to a lot of trouble to make the p.a. tank and antenna coupler coils bandswitching, but we must not expect the pi-coupler to provide the answer to all the harmonic radiation and selectivity problems.

CONCLUSION

We have seen where the harmonics come from and that there is just as much a selectivity problem as with receivers. Harmonics generated in the class C p.a. appear just as strongly in the aerial with the best shielding applied to our transmitter construction as with no shielding whatsoever because they can go along the "honest way", amplified in the valves and in the not-too-selective tuned circuits.

Harmonics reaching the aerial are more likely to cause t.v.i. and b.c.i. because from this point they have a better chance of being radiated over considerable distances.

If a not-too-well shielded chassis is radiating, it may not be so bad as the harmonics may not even reach our back fence, but this statement is not quite correct because with an r.f.-hot chassis we have less chance to reduce harmonics with a low-pass filter or even an antenna coupler, so shielding is still highly recommended.

Max Seybold described in August '47 "QST" an open-built transmitter which was t.v.i. proofed. This transmitter had no shielding, an r.f.-cold chassis, and no low-pass filter, but several wave traps to draw the most dangerous harmonics out of the tuned circuits and then this energy was fed back (like negative feedback) with the correct phase neutralising the harmonics to a very high degree. Similar wave traps are now used in t.v. receivers. Modern transmitter designers found it difficult to adjust this neutralisation of harmonics and preferred shielding, filtering, aerial coupler and low-pass filter.

Shielding without enough selectivity can never give a transmitter a low output in harmonics if a class C stage is used as the driver and final.

In certain cases it may be possible that fairly strong harmonics can be tolerated and will not cause t.v.i. if the t.v. signal is very strong (10 mV. or more) and no harmonics appear near any t.v. channel, but this speculation is not a safe way.

ACKNOWLEDGMENT

Acknowledgment is given R.C.A. and A.V.V. Co. Pty. Ltd. for reprinting data published by L. Reinartz in "Radiotronics" No. 137, May-June, 1949.

50 Mc. W.A.S.

Call	Cer. Add.	No. Cntr.	Call	Cer. Add.	No. Cntr.
VK2WJ	13	4	VK2AEZ	10	1
VK2VJ	5	3	VK2XA	11	1
VK2VJ	9	3	VK2XN	12	1
VK2YR	2	2	VK2ACL	14	1
VK2HR	4	2	VK2ZD	16	1
VK2DW	3	1	VK2JRO	8	1
VK2HT	6	1	VK2ABC	9	1
VK2HT	7	1	VK2WH	15	1

Getting the 1155A Going

A. G. LOVEDAY* (Assoc. VK4 Div.)

THERE seems to be quite a lack of information available to short wave listeners and associate members on 1155A receivers. My efforts to obtain such information have been in vain. The aim was to alter minor portions of the receiver to suit requirements at this location. My power comes from a lighting plant of 24/32 volts d.c.

The 1155A type receiver originally is a 10 valve superhetrodyne receiver and provides reception of c.w., m.c.w., and r.t., and also gives both visual and aural d.f. with sense determination.

The circuit features r.f. stage (6U7), mixer (X66), two i.f. stages (6U7s) at 560 Kc., giving a bandwidth of 5 Kc. The high frequency osc. is set on the high side. Diode detection is used. This and the output are in one tube, a MHL6. Another such tube is used for b.f.o. and a.v.c. A tuning indicator is also used.

The d.f. units are VR99s (V1 and V2) as aerial switch valves, V9 is a VR102 (a double triode) as meter switch.

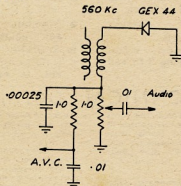


Fig. 1.—Detector and a.v.c. circuit after modification.

I removed the valves associated with the d.f. unit, namely V1, V2 and V9. A little examination will locate the aerial input which can be soldered to appropriate lug of aerial section of band switch.

I also removed the cumbersome switch marked "a.v.c., balance" etc. In its place I have fitted the Q multiplier, as featured in "CQ" of Jan. 1955. Also fitted the a.v.c. on/off switch to the original "filter" switch, having removed the "high pass" filter transformers. Other parts removed were meter balance, meter deflection, and aural sense controls.

For r.f. gain, I use a 5,000 ohms carbon potentiometer, which is placed under the tuning knobs with the tone control to balance the appearance.

Having struck trouble with the b.f.o. coil (which is 280 Kc.—the second harmonic being used), I substituted a

455 Kc. oscillator coil with 500 pF. across the grid and tuned the slug to get the beat note.

V6 (2nd i.f.) was also replaced with a 6J8, using the triode section as the b.f.o. "tube", coupling being taken care of automatically (remember I am on low volts d.c.). A germanium diode (type GEX44) is used as detector. The audio is a 12SQ7 and 12A6 placed at opposite end of chassis and occupying positions of V1 and V2. For 6v. chaps a 6J7 and 6V6 is the best.

The tuning indicator was replaced with an 0-10 Ma. meter in the plate circuit of the i.f. tubes.

No noise limiter is fitted as it is not required at this location.

High tension should be limited to a maximum of 200 volts.

The a.v.c. is very simple and allows me to change bands without having to turn the volume up or down as the case may be. I do not use delayed a.v.c. so overcome any primary loading as is so often done by taking it to a diode. No a.v.c. is on the converter tube.

I will be pleased to answer any queries on the above receiver.

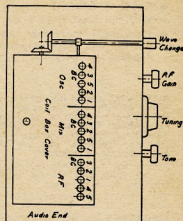


Fig. 2.—Plan of Coil Box of 1155A. Tuning Range

- Position 1—7.5 Mc. to 18 Mc.
- " 2—3.0 Mc. to 7.5 Mc.
- " 3—600 Kc. to 1500 Kc.
- " 4—200 Kc. to 500 Kc.
- " 5—75 Kc. to 200 Kc.

SUBSCRIPTIONS

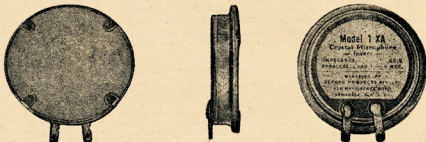
● Please pay your Subscriptions PROMPTLY when due. Failure to do so may result in the loss of valuable issues of "Amateur Radio." High costs of production make it necessary to limit the number of extra copies printed each month.

* Ellimbah, Queensland.

MODEL "1XA" CRYSTAL MICROPHONE INSERT



AUSTRALIAN MADE — — FOR AUSTRALIAN CONDITIONS



FITTED WITH PLATED REAR SHIELD TO ELIMINATE HUM PICK-UP

- Patented crystal unit guarantees outstanding efficiency and performance.
- Protected against ingress of moisture with approved moisture sealed crystal element.
- Small — compact — lightweight — durable.
- Will not blast from close speaking.
- Precision engineering ensures realistic reproduction and high output with long life and dependable operation.

- The only unit available with a genuine sintered metal filter.
- Good high frequency response ensures excellent speech reproduction.
- Aluminium diaphragm mechanically protected and frequency controlled by "Zephyril" filter.
- Australian made throughout.
- Only carefully selected cements used throughout, to suit Australian climatic conditions.

TECHNICAL DETAILS

Rochelle salt crystal microphones are perhaps the most widely used for all types of service where quality speech and music reproduction at high output levels is a requirement. They are dependable in performance and when fitted with the appropriate "Zephyril" filter, their frequency response may be adjusted to suit any application or requirement.

This crystal microphone requires to be terminated with a high value parallel load of the order of 1 to 5 megohms for best results.

The mass of the moving parts is small, hence the sensitivity is high and a high efficiency is achieved.

Light gauge solder lugs are provided so that excessive heat in soldering will not be transmitted to the crystal element.

When mounted in a microphone cage, it is recommended that the insert be suspended in rubber, to eliminate shock and vibration.

One of the connecting lugs is directly connected to the case and care should be taken to solder the metal shield of the microphone cable to this solder lug, keeping the unscreened portion of the centre conductor as short as possible to eliminate hum pick-up.

All crystal elements are mounted on high grade suspension pillars, being fixed thereto with a good quality cement, thus ensuring stability and long life.

Case $1\frac{1}{2}$ " diameter (rear), $\frac{7}{8}$ " thickness, 1-13/16" overall diameter (front) with filter fitted.

Frequency Response = 60-6,500 c.p.s.
Output Level = -45 db (0 db = 1 volt/dyne/cm²)
Impedance = Model 1XA Grid 1 — 5 megohms.



Approximate Frequency Response Curve

AVAILABLE FROM ALL LEADING TRADE HOUSES

ZEPHYR PRODUCTS PTY. LTD.

58 HIGH STREET, GLEN IRIS, S.E.6, VIC.

Phone: BL 1300

HOW'S YOUR SOLDERING?*

PRACTICAL POINTERS ON MAKING GOODS JOINTS

BY JOHN E. MAGNUSSON, W0AGD

UNDERSTANDING the art of soldering always has been necessary for the radio constructor, and since the introduction of kits for the Amateur, the need is more apparent than ever because of the more complex equipment being put together by beginners. We hope that the following may be of as much interest to the old timer as to the new member of the club excitedly unpacking his first kit of electronic parts.

In order to understand some of the difficulties encountered in soldering it is necessary to appreciate exactly what it is that we are attempting to accomplish. Soldering is the bonding together of two similar (or dissimilar) metals by means of a third metal which exhibits the property of adhesion when in the molten state. The melting temperature of solder, a mixture of tin and lead, is determined by the percentage of tin. The proportions of tin and lead are usually indicated by the manufacturer, 50-50 being a common mixture for electrical work.

The principal obstacle to good soldering is oxidation. The rate at which a metal oxidizes is a measure of its resistance to the adhesive property of the solder. Aluminium will oxidize at a rate practically equal to that at which the melting solder is applied, so regardless of the size of the soldering iron or the melting temperature of the solder, attempting to solder aluminium turns out to be an exasperating ordeal as long as the oxygen ever present in the air is in contact with the aluminium. The thin coating of aluminium oxide that forms will not allow the solder to adhere to the clean metal directly below.

You say you can't construct a vacuum chamber in order to solder two pieces of aluminium together? No need to, since the application of high viscosity oil or grease immediately on cleaning the surface to be soldered will protect it from the atmosphere and allow the melted solder to gain access to a clean surface. Even so, the amount of energy expended in the preparation of the surface before applying the flux will be reflected in the degree of success obtained. This also holds true for other metals than aluminium; stubbornness to the adhesion of solder with any metal merely indicates the presence of oxidation in varying degrees. Soldering two new and shiny pieces of copper together is a real pleasure. So the first rule is that the two surfaces to be soldered must be clean and bright.

THE IMPORTANCE OF PROPER HEAT

Contrary to the general impression, there is a great deal more to soldering than merely melting the solder with an adequate amount of heat and piling

● Everybody knows how to solder—or so they think. It will pay to read this, just in case you may have missed one or two of the fine points.

it neatly (or otherwise!) on the junction to be bonded. Surprisingly, there are more people soldering poorly than there are doing an adequate job of soldering. Manufacturers selling equipment in kit form will concur that the largest percentage of trouble experienced by customers is directly traceable to the inability to solder properly.

Take the example of the too-common "rosin joint" or "cold joint." When several connections have to be made to a single tie point the result will often be a cold or rosin connection unless proper precautions are observed. As heat is applied to the solder and the connection, the rosin flows around each individual conductor connected to this particular tie point in order to keep the metal clean and free from oxidation for the solder to follow. If an inadequate amount of heat is applied the rosin will not be displaced by the solder, and as the connection cools a thin coating of rosin actually insulates each connection from the other and the tie point. In a circuit where an appreciable amount of voltage is applied the rosin film may break down and may never become evident to the builder. However, the connection might be for the grid of the first audio stage, where we are dealing with a few hundredths of a volt, and in that case we could just as well have left the connection out of the equipment for all the good it will do.

By the same token, excessive heating of a connection will have the same unhappy effects. The solder itself will oxidize when overheated. All of us have had the experience of picking up a soldering iron after a long period of heating on the stand and finding it practically useless. The grey and granular-looking appearance of the tip indicates oxidized solder. Eventually this gives way to a crusty black copper oxide which makes the iron useless until retinned.

Overheating of the connections may also have more serious consequences than a poor connection electrically. The values of composition resistors will change very appreciably with excessive heating, and the semi-conductor devices employed in some circuits may be destroyed. A little common sense goes a far in soldering as it does in any other endeavour; use enough heat to make the solder flow freely but don't apply the iron any longer than is necessary to make a good joint.

APPLYING THE IRON AND SOLDER

The old saying about the craftsman and the condition of his tools certainly applies when one considers the tip of the soldering iron—called, more correctly, the "soldering copper." This copper tip will oxidize at an alarming rate when heated unless it, too, is protected from the atmosphere with a thin coating of solder. During an evening session of soldering it is advisable to wipe the tip clean occasionally with a dry cloth and replace the excess solder just removed with a fresh supply. A heat-regulating stand also will add greatly to the life and usefulness of the instrument.

With the tip of the soldering iron in tor condition, and using a good grade of solder with a rosin core, one should be able to place the tip on one side of the connection to be soldered and the solder on the opposite side and actually pull the melting solder through the junction as it becomes heated to the proper temperature.

In order to provide maximum heat transfer from the tip to the connections to be soldered, it is usually desirable to melt a small amount of solder between the tip and the connection before moving the supply of solder to the other side. But don't attempt to solder by melting the solder against the tip and letting it run onto the work. This will burn up the rosin before it gets a chance to do its job of cleaning the way for the solder itself.

Once the solder is flowing smoothly through the connection there is no need to pile on an excessive amount of solder since it will add little, either electrically or mechanically, to the connection. When in doubt as to the reliability of a given connection merely reheat it, adding the minimum possible amount of solder, and see whether there is any evidence of rosin boiling up through the melted solder. Again keep in mind that prolonged heating of a connection may have the same ill effects as inadequate heating.

It is generally safe to say that the ease with which the connection takes the solder is a good indication of the reliability of the joint. Connections that seem to take twice as long and twice as much solder as normally expected should be examined closely; the possibility that the solder has flowed away from the joint to nearby connections is ever present. This form of short circuiting is quite common in the crowded areas around tube socket terminals and the terminals of multiple tie points. Such a difficulty is usually indicative of excessive oxidation of the leads or terminals, and usually a small amount of scraping is necessary in order to achieve the proper electrical connection. Patience is a very rewarding virtue in soldering, since tracking

(Continued on Page 9)

* Reprinted from "QST," September, 1957.

1957 REMEMBRANCE DAY CONTEST RESULTS

Western Australia Wins Again

STATE TROPHY

Western Australia .. 972 points

CALL AREA AWARDS

Phone:	Points
VK1PM—R. E. W. May ..	777
3ATR—T. B. Rodda ..	854
4FP—J. F. Pickles ..	634
5MG—J. F. Moffatt ..	726
*5LJ—R. Lewis ..	88
6TH—T. H. Talbot ..	697
7PM—P. D. Mulligan ..	583
9HO—H. T. Overend ..	314

C.W.:	Points
VK2QL—F. T. Hine ..	471
3XB—I. Stafford ..	409
4JY—J. G. Files ..	196
5MJ—H. M. Roberts ..	299
*5TL—T. Laidler ..	127
6VK—V. J. Kitney ..	96
7CH—C. Harrison ..	401
9WP—W. A. P. Luke ..	35
0AB—A. C. Hawker ..	402

Open:	Points
VK2RS—D. C. Haberecht ..	969
3ATN—T. R. Naughton ..	1228
4DP—D. M. Portley ..	731
5WO—A. Condon ..	1003
*5FM—H. Bowman ..	129
6RU—J. E. Rumble ..	1146
7KA—K. E. Millen ..	479
9DB—D. Beadel ..	883

Listeners:	Points
VK2—N. L. Dash ..	477
VK3—A. C. Stebbing ..	736
VK4—C. H. Thorpe ..	850
VK5—F. W. Aslin ..	921
VK6—C. J. Anderson ..	407
VK7—R. R. de Balfour ..	1035
VK9—R. Clark ..	314

* Northern Territory.

NEW SOUTH WALES

VK2RS Open	969	Average	690.3
1PM Phone	777	Licenses	1156
2AHH Open	636	Logs	59
2PN Open	611		
2XQ Open	597		
2AHH Open	552	Total Pts.	725.5

Phone:					
VK2ASZ	471	VK2GI	127	VK2AJA	40
2JS	328	2AIM	166	2VW	40
2AWN	208	2PL	90	2NV	39
2ACD	204	2JF	82	2HK	38
2AJL	175	2ABO	78	2AVI	38
2AAJ	160	2XT	53	2RU	34
2AIA	154	2APQ	47	2CN	23
2AGJ	154	2ADL	45	2ACS	18
2SR	146	2AOU	44	2AQR	13
2FM	144	2AJY	40	2AHA	10

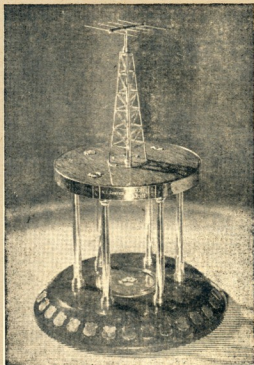
Open:					
VK2BO	536	VK2ADT	222	VK2GW	90
2AGH	388	2AJQ	178	2ANU	78
2AJO	379	2HC	172	2VN	75
2ARV	375	2AWQ	142	2HZ	89
2AFA	232			2ZC	30

C.W.:					
VK2QL	471	VK2BA	163	VK2EG	111
2EL	380	2HO	133	2OW	47
2YB	256	2EO	115	2PV	43

VICTORIA

VK3ATN Open	1228	Average	789.6
3HG Open	888	Licenses	1093
3ATR Phone	854	Logs	70
3DQ Phone	631		
3ADW Phone	588	Total Pts.	840.1
3AGG Phone	549		

Phone:					
VK3HZ	511	VK3AUG	185	VK3QZ	61
3AIT	496	3AKF	182	3TX	58
3ZU	448	3KR	175	3AWF	54
3EB	444	3AXW	173	3H	49
3ADV	386	3WY	154	3AXU	48
3APS	377	3ADU	134	3ZZ	48
3ALP	344	3ALE	122	3HL	43
3ABT	325	3VQ	121	3ALD	38
3SX	299	3ATS	105	3VQ	34
3AQK	296	3AOM	82	3AGP	28
3ARJ	294	3ALL	84	3APJ	26
3FY	257	3AZR	75	3RN	22
3LR	243	3DG	72	3HC	20
3AN	219	3DY	65	3AVM	16



Remembrance Day Trophy retained by West. Australia

Open:					
VK3HE	285	VK3YS	116	VK3JE	102
3PR	169	3JI	112	3OH	70
C.W.:					
VK3XB	409	VK3NK	83	VK3KB	24
3ZA	179	3AND	83	3KS	24
3ZC	174	3ARV	65	3PG	16
3ZO	161	3CX	49	3PL	13
3AHQ	124	3JF	40	3OJ	11
		3XH	36		

Check Logs: VKs 3BQ, 3GE, 3UM.
Disqualified Log: VK3JO, valid contacts 4.

QUEENSLAND

VK4DP Open	731	Average	470.3
4FP Phone	634	Licenses	367
4WJ Phone	381	Logs	50
4OV Phone	365		
4DI Open	358	Total Pts.	534.4
4DJ Phone	353		

Phone:					
VK4NG	265	VK4BW	85	VK4ZZ	23
4DK	237	4SN	84	4JE	17
4TF	180	4EP	60	4AF	17
4BB	156	4RH	56	4BT	16
4PW	151	4W	55	4ZW	15
4VS	134	4ZP	50	4NJ	15
4RJ	121	4XR	48	4XJ	15
4ER	116	4CN	46	4ZM	14
4LN	108	4RW	31	4HA	13
4JA	104	4GG	29	4PR	11
4LE	74	4EC	23	4RE	10
		4HD	23		

Open:					
VK4FH	228	VK4DO	184	VK4NU	167
		4FE	170		
C.W.:					
VK4JF	196	VK4AQ	32	VK4AW	13
4CJ	51	4KX	18	4XY	10

Check Logs: VKs 4BI and 4SH.

SOUTH AUSTRALIA

VK5WO Open	1003
5AF Open	843
5MG Phone	726
5KM Phone	715
5DK Phone	634
5EF Phone	498
Average	736.5
Licenses	416
Logs	66
Total Pts.	888.7

Phone:	Points
VK5QW 469	VK5PM 57
5ZB 407	5FT 35
5GM 397	5CJ 33
5XV 369	5ON 48
5BH 363	5XA 47
5JC 338	5CY 47
5FY 298	5CH 45
5LT 271	5AB 41
5CO 258	5SX 41
5HN 253	5LB 40
5LC 224	5FO 39
5OC 208	5PS 37
5FQ 194	5WH 33
5AX 169	5LN 31
5FJ 161	5HW 31
5KD 147	5XU 31
5OK 122	5JO 30
5JT 118	5RG/P 25
5AP 110	5MA 24
5GP 108	5WI 23
5KY 103	5ZL 18
5IW 92	5D 18
5SS 92	5MK 17
5RR 83	5CA 16
5KK 71	5DH 16
5BG 68	5DO 14
5LQ 67	5MS 11
5RK 63	5EC 8

Open:	Points
VK5KE 338	VK5TW 42
5JT 316	5HM 39
5JC 292	5W 6
5QR 71	

C.W.1					
VK5MY	299	VK5AK	75	VK5EA	37
5XK	267	5OR	72	5RX	36
5JN	219	5BZ	54	5BY	26
5MZ	123	5KU	52	5BO	22
		5HQ	52		

Check Log: VK5LL.

NORTHERN TERRITORY

Phone:	Open:	C.W.:
VK5LJ 88	VK5FM 129	VK5TL 127
		SUM 25

WESTERN AUSTRALIA

VK6RU Open	1146	Average	700.5
6TH Phone	880	Licenses	219
6BE Phone	624	Logs	85
6MO Phone	576	Total Pts.	972.4
6NF Phone	280		

Phone:			
VK6CL	271	VK6AD	30
6ZL	280	6TC	29
6ZL	100	6TK	29
6TB	95	6WI	29
6CP	94	6FL	28
6RH	84	6FL	27
6AV	83	6OR	26
6RW	82	6LU	25
6CN	79	6TL	24
6WZ	77	6EW	23
6KE	71	6HK	23
6DX	70	6KW	23
6MG	64	6CB	22
6BO	51	6RK	21
6LL	43	6PT	20
6LM	43	6EA	20
6HS	36	6AL	20
6XG	34	6MY	20
6KJ	33	6SJ	20
6HR	32	6EF	19
6TR	31	6WM	19
		6XI	19

Open:			
VK6WG	71	VK6GA	25
		VK6GU	18

C.W.:			
VK6VK	96	VK6AJ	35
6Z	92	6KX	25
6T	92	6JA	20
6RS	42	6WH	20
		6JB	10

Insufficient valid contacts: VKs 6TX, 6WU, and 6ZL.

TASMANIA

VK7PM Phone	583	Average	489
7RL Phone	571	Licenses	121
7SM Phone	530	Logs	50
7KA Open	479		
7CH C.W.	401	Total Pts.	691
7JP Phone	370		

Phone:			
VK7GC	361	VK7AB	107
7MC	355	7GA	99
7WA	334	7BI	83
7BT	283	7PJ	82
7AL	288	7RM	62
7SF	263	7BQ	53
7LS	237	7KC	52
7BR	227	7CP	40
7RN	208	7JD	37
7TC	200	7DW	31

Open:			
VK7JO	367	VK7OD	180
7FM	248	7SD	154
7BJ	194	7AG	17

C.W.:			
VK7TY	87	VK7L	29
TRY	78	TGB	17
		7ST/P	11

PAPUA-NEW GUINEA

VK9DB Open	883	Average	449.5
8XK Open	649	Licenses	48
9NT Open	330	Logs	8
9HO Phone	314		
9BW Phone	271	Total Pts.	524.4
9FN Phone	250		

Phone:		C.W.:	
VK9WG	22	VK9SP	33

ANTARCTICA

C.W.:	
VK9AB	402
OAS	222

LISTENERS' SECTION

NEW SOUTH WALES			
N. L. Dash	477	D. W. Shepherd	236
D. Ganley	379	VKZDDN	229
Disqualified Logs: B. J. Foster, B. Harwood.			

VICTORIA

A. C. Stebbing	736	I. R. Woodman	571
WIA-L3650	736	WIA-L3066	571
G. R. Morris	696	C. T. ...	41
I. Drysdale	631	H. M. Hillard	388
J. J. Hunt	631	R. J. Dempster	388
WIA-L3007	632	E. W. Trebilcock	388
		BERS195	292

QUEENSLAND

C. H. Thorpe	830	L. O. Tully	235
A. G. Loveday	409		

SOUTH AUSTRALIA

F. W. Aslin	921	W. J. Clayton	250
WIA-L5620	921	WIA-L5015	250
S. S. Crawford	441		
WIA-L3001	441		

WESTERN AUSTRALIA

C. J. Anderson	407		
Disqualified Logs: B. Prosser, F. H. Price, F. W. L. Hardwick.			

TASMANIA

R. A. de Balfour	1035		
Disqualified Log: J. P. Wilson.			

PAPUA-NEW GUINEA

R. Clark	WIA-L3001	314	
Disqualified Log: F. B. Lea.			

OCEANIA RESULTS OF W.A.E.D.C.

1956-57

Station	Points	QSOs Multp.
VK2GW	15129	180 169 41
VK4FJ	1710	47 43 19
ZL1MQ	1180	55 39 20
ZL2GS	8388	129 104 36
ZL4GA	3672	83 70 24

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TRANSMITTING AND NEUTRALISING CONDENSERS

481 Midget Neutralising Condenser, 1.5 to 4 pF.	8 0
815 Single Section 69 pF., one end plate, 2 in. square	1 13 11
816 Single Section, 175 pF.	1 17 1
817 Single Section 250 pF., one end plate, 2 in. square	2 2 5
821 Split Stator 25 x 25 pF., two end plates, 2 1/2 in. square	3 1 6
832 Split Stator 50 x 50 pF., two end plates, 2 1/2 in. square	3 14 2
833 Split Stator 100 x 100 pF., two end plates, 2 1/2 in. square	5 11 3
834 Differential 100 x 100 pF., two end plates, 2 1/2 in. square	5 9 1
835 Single Section 230 pF., two end plates, 2 1/2 in. square	3 14 2
836 Single Section 100 pF., two end plates, 2 1/2 in. square	3 3 7
Plus 12 1/2 % Sales Tax	

MICROCONDENSERS

476 Split Stator 15 x 15 pF.	17 7
580 Single Section 12.5 pF.	15 6
581 Single Section 60 pF. (screw-driver adjustment)	1 0 0
582 Single Section 50 pF.	1 0 0
583 Split Stator 25 x 25 pF.	18 4
584 Butterfly 25 x 24 pF.	19 5
585 Single Section 100 pF.	1 5 6
586 Single Section 140 pF.	1 6 8
587 Butterfly 15 x 15 pF.	1 2 2
588 Single Section 27.5 pF.	17 9
589 Single Section 54 pF.	1 0 0
719 Differential 25 x 25 pF.	18 4
720 Single Section 100 pF.	1 16 7
728 Butterfly 8 x 8 pF.	1 2 2
Plus 25% Sales Tax	

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551 Butterfly 25 x 25 pF., 90 degree rotation	1 10 0
552 Split Stator 25 x 25 pF., 180 degree rotation	1 10 0
553 Single Section 50 pF., 180 degree rotation	1 7 9
Plus 25% Sales Tax	

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That Really Work

737 Choke, 2.5 millihen. induct.	6 11
738 Choke, " "	4 9
1010 Choke, 1.25 " "	4 9
1011 Choke, 4.6 microhen. " "	7 8
1022 Choke, 1.5 millihen. " "	3 5
1066 Choke, 13 " "	9 0
Plus 12 1/2 % Sales Tax	

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There's no substitute for practical experience—the "KNOW-HOW" of manufacture—the FACTS gained by research. That's why the originators and pioneers of T.V. Aerial manufacture, the "Belling-Lee" organisation, is producing in Australia a Double-V Aerial that is YEARS AHEAD of others in its performance, construction and quality.

FACTS ABOUT 'BELLING-LEE' DOUBLE-V TV AERIALS

- Brilliant, unequalled performance—PROVED BY FIELD TESTS BY INDEPENDENT LABORATORIES.
- MEASURED RELATIVE GAIN compared with that of half wavelength folded dipoles is: Chan. 2, 1.5 db.; Chan. 7 and 9, between 6 db. and 7 db. Compare these results with any other published figures and you will appreciate "Belling-Lee" superiority.
- They are easy and fast to erect. Made of high-tensile aluminium alloy, they are EXTRA STRONG; they go straight up and stay up straight. They are corrosion-resistant, withstanding all climatic conditions.
- Available in four alternative mountings—wall, chimney, flat roof, or inside roof.
- Every aerial is individually tested and GUARANTEED in writing for 12 months, your assurance that when you install "Belling-Lee" your first cost is your last.

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the Proved
DOUBLE V!*

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DOUBLE-V
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JB 1614

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MEADOWBANK, N.S.W.
WY 0316

WARNING!*

BY ZLIWI

Last Field Day I learned a little about batteries, the hard way, so I am passing on my experiences.

Two 6 volt batteries were being charged from a motor generator for about two hours, and were gassing vigorously. I went to take them off charge and to charge two more. I was removing the first clip when there was a loud report and something grazed the side of my face. The battery caps had been loosened, but not taken out prior to charging. One of these caps was missing. Later half of it was found.

When a battery is being charged, hydrogen is given off. Mixed in certain proportions with air, an explosive gas is formed. Presumably when I lifted off the clip and broke the charging circuit, a spark ignited the gas, blowing off the cap.

It needs little imagination to think of what might have been the result, had the cap hit me in the eye instead of a glancing blow, or had acid been blown out of the cell.

The following precautions are suggested when changing batteries:

1. Either stop the motor generator or break the charging circuit by disconnecting one of the leads at the generator, where a spark does not matter. It is assumed that the generator is a few feet away from the batteries.
2. Do not bend over the batteries when changing clips, but stand to one side, keeping the face clear.
3. No smoking!!!

2 and 3 also apply when testing batteries with a hydrometer, as acid can easily be splashed when emptying the hydrometer.

Should acid be splashed into an eye it should be immediately washed out with water. Every second's delay increases the damage done.

Where does one get water from in a hurry on a field day? Before the field day starts, several clean bottles should be filled with clean water and kept handy to the batteries during changing, and not used for anything else.

I also felt that the charging of batteries could be improved. Charged batteries were getting short on Sunday and the charging rate was increased to 20 amps. After some of the batteries had been charging for two or three hours the cases were getting very warm to touch. If the outside of a battery is warm, then the inside must be a lot hotter, and heat is one of the things that damages a battery.

It would seem that 10 amps. for 6 volt and 5 to 6 amps. for 12 volt batteries is the maximum continuous charge if the batteries are not to get unduly hot.

HOW'S YOUR SOLDERING?

(Continued from Page 5)

down a poor or intermittent connection later can be as frustrating as trying to put a raw oyster in a parking meter.

SOLDERING IRONS

The selection of equipment is more or less a matter of personal choice. The present-day market displays a wide variety of soldering pens, guns, and irons of all shapes and sizes, with and without thermostatic control. Experience dictates that at least two sizes are almost an absolute must. Perhaps the most generally useful soldering iron for general building, as well as repair work, is the 60-watt size. This size is small enough to get into fairly tight spots, but still has enough capacity for the heavier connections that are typical of transmitter tank circuits. A fine follow-up for occasional heavy work is the fast-acting two-speed 200-250-watt soldering gun.

A reasonable amount of care should also be used in the selection of solder. Never use reclaimed solder in the con-

struction of electronic equipment of any kind. (If the solder is reclaimed it should be clearly marked on the end of the spool.) By the same token, avoid bargain solders and you'll avoid bargain connections. And always use rosin flux on radio gear.

As is true in all pursuits, experience is the best teacher. The knack of being able to solder almost anything at will comes after exposure to several discouraging defeats. One cannot expect to master soldering in a few easy lessons, but one can improve upon his present ability, regardless of experience, by assuming that there is possibly a little more to learn about it.

PERMITS GRANTED FOR TELEVISION EXPERIMENTS

VK— New South Wales
 21T/T—W. R. Beveridge, 18 Murdoch St., Turramurra.
 2ZF/T—N. L. Southwell, 90 Dutton St., Yagoon.
 2ARY/T—G. Hine, 13 Kelvin Ave., Panania.
 2AWZ/T—D. Andrews, 21 Warwick Ave., North Ryde.
 2ZBQ/T—N. R. Fenton, 500 Cabramatta Rd., Cabramatta.

Victoria
 3TQ/T—A. Simmons, 43 Simmons St., South Yarra.
 3YR/T—W. D. Robb, 11 Derry St., Essendon West.
 3AAK/T—C. S. Rann, 2 Georgianna St., Sandringham.
 3AMN/T—I. D. McNabb, Lot 62 Paton Rd., Boronia.
 3AUX/T—G. E. Hughes, 2 McMillan St., Elsternwick.
South Australia
 5GL/T—C. D. L. Tilbrook, 10 Corunna Ave., Colonel Light Gardens.

CHANGE OF ADDRESS

W.I.A. members are requested to promptly notify any change of address to their Divisional Secretary, not direct to "Amateur Radio."

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- DX Countries, Prefixes and their Zones.

VALVE DATA

6U8

MEDIUM-MU TRIODE, SHARP CUT-OFF PENTODE

The Radiotron 6U8 is a 9-pin miniature valve containing a medium-mu triode and a sharp cut-off pentode in one envelope. It is designed primarily for use as a combined oscillator and mixer valve in f.m. and television receivers using intermediate frequencies up to 40 Mc.

The pentode mixer unit of the 6U8 provides low grid No. 1 to plate capacitance as compared with a triode mixer and also has a low output capacitance. The low value of capacitance between grid No. 1 and plate minimises feedback problems often encountered in mixer circuits operating with intermediate frequencies between 30 and 40 Mc.

Base: 9-pin miniature.

Socket connections:

- Pin 1—Triode plate.
- Pin 2—Pentode grid No. 1.
- Pin 3—Pentode grid No. 2.
- Pin 4—Heater.
- Pin 5—Heater.
- Pin 6—Pentode plate.
- Pin 7—Pentode cathode, pentode grid No. 3, internal shield.
- Pin 8—Triode cathode.
- Pin 9—Triode grid.

Electrical Data

Heater voltage	6.3 volts
Heater current	0.45 amp.

Characteristics:

	Triode Pentode
Plate voltage	150 250 volts
Grid No. 2 voltage	— 110 volts
Cathode-bias resistor	56 68 ohms
Amplification factor	40 —
Plate resistance	5000 40000 ohms
Transconductance	8500 5200 μ hos
Grid No. 1 bias for plate current of 10 μ A	—12 —10 volts
Plate current	18 10 Ma.
Grid No. 2 current	— 3.5 Ma.

CONVERTER SERVICE

Maximum Ratings:

Plate voltage	300* 300* volts
Grid No. 2 (screen) supply voltage	— 300* volts
Grid No. 2 voltage	— 125 volts
Grid No. 1 (control-grid) voltage: positive bias value	0* 0* volts
Plate dissipation	2.7* 2.8* watts
Grid No. 2 input: For grid No. 2 voltages up to 150 volts	— 0.5* watt
Peak heater-cathode voltage:	
Heater negative with respect to cathode	90* 90* volts
Heater positive with respect to cathode	90* 90* volts

* Maximum.

12BY7

SHARP CUT-OFF PENTODE

The Radiotron 12BY7 is a high transconductance pentode designed for use as a wide band video amplifier where the plate supply voltage is low and large output voltages are required with low values of plate load resistors. Such an application is the video output stage of a television receiver.

The valve has a 9-pin miniature base and has a centre-tapped heater to permit operation from either a 6.3 volt or 12.6 volt supply.

Base: 9-pin miniature.

Socket connections:

- Pin 1—Cathode.
- Pin 2—Grid No. 1.
- Pin 3—Grid No. 3, Internal Shield.
- Pin 4—Heater.
- Pin 5—Heater.
- Pin 6—Heater Centre-Tap.
- Pin 7—Plate.
- Pin 8—Grid No. 2.
- Pin 9—Grid No. 3, Internal Shield.

Electrical Data

	Series	Parallel
Heater voltage	12.6	6.3 volts
Heater current	0.3	0.6 amp.

CLASS A1 AMPLIFIER

Maximum Ratings:	
Plate supply voltage	300* volts
Grid No. 3 (suppressor) voltage	0* volts
Grid No. 2 (screen) voltage	175* volts

D.X.C.C. LISTING

Listed below are the highest twelve members in each section. New members and those whose totals have been amended will also be shown.

PHONE

Call	Cer. Cnt. No. rtes	Call	Cer. Cnt. No. rtes
VK4FJ	21 202	VK3DB	31 161
VK3ATN	26 193	VK3JD	1 188
VK4HR	12 192	VK4KS	9 133
VK6RU	2 191	VK6KW	4 150
VK3BZ	3 176	VK4RW	23 147
VK3EE	10 163	VK3LN	11 141

New Members

VK3TE	37 115	VK7LZ	36 101
VK3HW	36 111	VK3ACN	30 101

C.W.

Call	Cer. Cnt. No. rtes	Call	Cer. Cnt. No. rtes
VK4FJ	29 224	VK3CX	26 210
VK3FH	15 226	VK3BY	45 202
VK3KB	10 225	VK2EO	2 191
VK3BZ	6 222	VK3VL	39 178
VK4ER	8 218	VK3OU	18 176
VK3XU	46 213	VK4EL	9 175

Amendments

VK3BO	33 171	VK5JT	54 125
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New Members

VK3ARV	59 105	VK2OW	58 101
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OPEN

Call	Cer. Cnt. No. rtes	Call	Cer. Cnt. No. rtes
VK3ACX	23 239	VK3TE	12 210
VK4FJ	32 238	VK3HG	3 201
VK4HR	7 233	VK2NS	16 195
VK3BZ	4 231	VK3DB	39 182
VK6RU	8 221	VK4EL	10 178
VK3XU	61 221	VK6KW	13 171

Amendments

VK3NT	63 131
-------	--------

New Members

VK3ARV	68 107
--------	--------

Grid No. 1 (control-grid)

voltage:	
Negative bias value	50* volts
Positive bias value	0* volts
Grid No. 2 input	1* watt
Plate dissipation	6.25* watts
Peak heater-cathode voltage:	
Heater negative with respect to cathode	200* volts
Heater positive with respect to cathode	200*+ volts

Characteristics:

Plate voltage	250 volts
Grid No. 3 ... connected to cathode at socket.	
Grid No. 2 voltage	150 volts
Cathode-bias resistor	68 ohms
Plate resistance (approx.)	90000 ohms
Transconductance	12000 μ hos
Plate current	25 Ma.
Grid No. 2 current	6 Ma.
Grid No. 1 bias for plate current of 20 μ A	—10 volts

Maximum Circuit Value:

Grid No. 1 circuit resistance:	
For cathode-bias	1.00* megohm
For fixed-bias	0.25* megohm

* Maximum.

† The d.c. component must not exceed 100 volts.

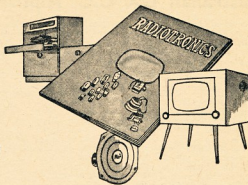
W.I.C.E.N. NOTES

Because it is necessary to submit January Notes early we are restricting these notes to first ten rules of Section Two of Instruction to W.I.C.E.N. Operators.

2.0 OPERATING PROCEDURE

- 2.1 ALL procedure used shall comply with the requirements of the "Handbook for Guidance of Operators of Amateur Wireless Stations".
- 2.2 Time System: Local time shall be used by all stations unless requested to do otherwise by appropriate authority.
- 2.3 When transmitting time, each digit shall be pronounced separately.
- 2.4 A signal log shall be maintained at each station. NOTE: In an emergency, a log would not be maintained by stations in the emergency area.
- 2.5 Frequencies to be used will be as assigned from time to time.
- 2.6 When a net frequency is in use a station desisting of carrying out tests shall first listen on the frequency to ensure that it will not cause harmful interference to other stations in the net. Further, the test call shall be limited to ten seconds; in the case of telephony, the test shall consist of spoken numerals, followed by the call sign of the station transmitting the test signals. C.W. transmission will consist of a series of Vees followed by the call sign of the station.
- 2.7 General Call. Control stations requiring to transmit information to all stations likely to intercept, shall preface such transmissions by the General Call—"All Stations" or "All Stations Emergency Net"—followed by "This is" and the identification of the calling station.
- 2.8 Stations replying to a general call shall answer in the order previously laid down. If any station does not answer within five seconds the next station in order shall carry on.
- 2.9 Before transmitting, every station shall listen for a period long enough to satisfy itself that it will not cause harmful interference. If such interference is likely, the station shall await the first break.
- 2.10 When a station hears a call without being certain that the call is intended for it, it shall not reply until the call has been repeated and understood.

REACH



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Australian DX C.C. Alphabetical List of Countries by Prefix

The list of Countries hereunder and as amended from time to time in Federal Awards Notes is the Official List to be used in connection with the issue of the Australian DX C.C. Award.

The list below shows first the Prefix, the Country, and the Zone Numbers in parenthesis (as used for "CQ" W.A.Z. award).

AC3-Sikkim	(22)	HB1-9-Switzerland	(14)
AC4-Tibet	(23)	HC-Ecuador	(10)
AP-Pakistan	(21, 22)	HC8-Galapagos Island	(10)
BV (C3)-Formosa	(24)	HE-Liechtenstein	(14)
C (unofficial)-China	(23, 24)	HH-Haiti	(8)
C3-See BV.		HI-Domin. Republic	(8)
C9-Manchuria	(24)	HK-Colombia	(9)
CE-Chile	(12)	HK0-Archipelago of San Andres & Providencia	(9)
CE7Z, LU-Z, VK0, VP8-Antarctica	(13, 29, 30)	HL-Korea	(25)
CE0-Easter Island	(12)	HP-Panama	(7)
CM, CO-Cuba	(8)	HR-Honduras	(7)
CN2, KT1-Tangier Zone	(33)	HS-Siam	(26)
CN8-French Morocco	(33)	HV-Vatican City	(15)
CP-Bolivia	(10)	HZ-Saudi Arabia	(21)
CR4-Cape Verde Is.	(35)	II-Italy	(15)
CR5-Port. Guinea	(35)	II1-Trieste	(15)
CR5-Principe, Sao Thome	(36)	IS, MS4-Ital. Soma'land	(37)
CR6-Angola	(36)	IS1-Sardinia	(15)
CR7-Mozambique	(37)	JA, KA-Japan	(25)
CR8-Goa (Port. India)	(22)	JY, ZC7-Jordan	(20)
CR9-Macau	(24)	JZ0-Neth. New Guinea	(28)
CR10-Port. Timor	(28)	K, W-United States of America	(3, 4, 5)
CT1-Portugal	(14)	KA-See JA.	
CT2-Azores Island	(14)	KA0-Bonin and Volcano Islands	(27)
CT3-Madeira Island	(33)	KB6-Baker, Howland & Amer. Phoenix Is.	(31)
CX-Uruguay	(13)	KC4-Navassa Island	(8)
DJ, DL, DM-Germany	(14, 15)	KC6-East. Caroline Is.	(27)
DU-Philippine Islands	(27)	KG1-West Caroline Is.	(27)
EA-Spain	(14)	KG6-See OX.	
EA6-Balearic Is.	(14)	KG4-Guantanamo Bay	(27)
EA8-Canary Is.	(33)	KG6-Mariana Islands	(27)
EA9-Irni	(33)	KH6-Hawaiian Islands	(31)
EA9-Rio de Oro	(33)	KI1-Johnston Island	(31)
EA9-Spanish Morocco	(35)	KL7-Alaska	(1)
EA9-Spanish Guinea	(35)	KM6-Midway Island	(31)
EL-Egypt	(14)	KP4-Puerto Rico	(8)
EL-Liberia	(35)	KP6-Palmyra Group, Jarvis Island	(31)
EQ-Iran	(21)	KR6-Ryukyu Island	(25)
ET2-Eritrea	(37)	KS4-Swain Island	(7)
ET3-Ethiopia	(37)	KS6-American Samoa	(32)
F-France	(14)	KT1-See CN2.	
FA-Algeria	(33)	KV4-Virgin Islands	(8)
FB8-Amsterdam and St. Paul Is.	(39)	KW6-Wake Island	(31)
FB8-Guernsey Is.	(39)	KX6-Marshall Islands	(31)
FB8-Madagascar	(39)	KZ5-Canal Zone	(7)
FC-Corsica	(15)	LA, LB-Jan Mayen	(40)
FD-French Togoland	(35)	LA, LB-Norway	(14)
FE8-Fren. Cameroons	(35)	LA, LB-Svalbard	(40)
FE8-Fren. West Africa	(35)	LA, LB-Arentina	(13)
FG-Guadeloupe	(8)	LU-Z-See CE7Z, VK0.	
FG-Saint Martin Is.	(8)	LX-Luxembourg	(14)
FI8-Vietnam	(26)	LZ-Bulgaria	(20)
FK8-New Caledonia	(32)	M1-San Marino	(15)
FL8-Fren. Somaliland	(37)	MB9-See OE.	
FM-Martinique	(8)	MP4-Bahrein Island	(21)
F08-Clipperton Is.	(7)	MP4-Kuwait	(21)
F08-French Oceania	(32)	MP4-Qatar	(21)
FP8-St. Pierre and Miquelon Is.	(5)	MP4-Trucial Oman	(21)
FG8-Fren. Equatorial Africa	(36)	MS4-See IS.	
FP7-Reunion Island	(39)	OA-Peru	(10)
F08, YJ-New Hebrides	(32)	OD5-Lebanon	(20)
FW8-Wallis and Futuna Islands	(32)	OE, MB9-Austria	(15)
FY7-Fr. Guiana & Inini	(9)	OF-Finland	(15)
G-England	(14)	OG-Czechoslovakia	(15)
GC-Channel Islands	(14)	ON4-Belgium	(14)
GD-Isle of Man	(14)	OQ5, O- Belgian Congo	(36)
GI-Northern Ireland	(14)	OX, KG1-Greenland	(40)
GM-Scotland	(14)	OY-Faeroes	(14)
GW-Wales	(14)	OZ-Denmark	(14)
HA-Hungary	(15)	PA0-Netherlands	(14)
		PJ2-Neth. West Indies	(9)
		PJ2M-Sint Marteen Is.	(9)

PK1, 2, 3-Java	(28)	VR1-Gilbert, Ellis and Ocean Islands	(31)
PK4-Sumatra	(28)	VR3-Fanning Is. Group	(31)
PK5-Neth'land Borneo	(28)	VR4-Solomon Islands	(28)
PK6-Celebes & Molucca Islands	(28)	VR5-Tonga (Friendly) Island	(32)
PX-Andorra	(14)	VR6-Pitcairn Island	(32)
PY-Brazil	(11)	VS1-Singapore Island	(28)
PZ1-Neth. Guiana	(9)	VS2-Malaya	(28)
SM-Sweden	(14)	VS4-Sarawak	(28)
SP-Poland	(15)	VS5-Brunei	(28)
ST-Anglo-Egyptian Sudan	(34)	VS6-Hong Kong	(24)
SU-Egypt	(34)	VS9-Aden and Socotra	(21)
SV-Greece	(20)	VS9-Maldives Island	(22)
SV-Crete	(20)	VS9-Sultan. of Oman	(21)
SV-Dodecanese	(20)	VU2-India	(22)
TA-Turkey	(20)	VU4-Laccadive Island	(22)
TF-Iceland	(40)	VU5-Andaman and Nicobar Islands	(26)
TG-Guatemala	(7)	XE-Mexico	(6)
TI-Costa Rica	(7)	XW8-Laos	(26)
TI9-Cocos Island	(7)	XZ-Burma	(26)
UA1, 3, 4, 6-European R.S.F.S.R.	(15, 16, 17)	YA-Afghanistan	(21)
UA9, 0-Asiatic R.S.F.S.R.	(17, 18, 19, 25)	YJ-Iraq	(21)
UB5-Ukraine	(16)	YJ-See FU8.	
UC2-White Russia	(16)	YK-Syria	(20)
US-S.S.R.	(16)	YN-Nicaragua	(7)
UD6-Azerbaijan	(21)	YO-Romania	(20)
UG6-Uzbek	(21)	YU-Salvador	(7)
UH6-Turkoman	(17)	YU-Yugoslavia	(15)
UI8-Uzbek	(17)	ZV-Venezuela	(9)
UJ8-Tadzhik	(17)	ZA-Albania	(15)
UL7-Kazakh	(17)	ZB1-Malta	(15)
UM8-Kirghiz	(17)	ZB2-Gibraltar	(14)
UN1-Karelo-Finnish Rep.	(16)	ZC3-Christmas Islands	(29)
UO5-Moldavia	(16)	ZC4-Cyprus	(20)
UP2-Lithuania	(15)	ZC6-Brit. Nth. Borneo	(28)
UQ2-Latvia	(15)	ZC6-Palestine	(20)
UR2-Estonia	(15)	ZC7-See JY.	
VE, VO-Canada (2, 3, 4, 5)		ZD1-Sierra Leone	(35)
VK-Australia (29, 30)		ZD2-Nigeria	(35, 36)
VK0-See CE7Z, LU-Z, VP8.		ZD3-Gambia	(35)
VK0-Heard Island	(39)	ZD4-Gold Coast, Brit. Togoland	(35)
VK0-Macquarie Island	(30)	ZD6-Nyasaland	(37)
VK9-Cocos Island	(29)	ZD7-St. Helena	(36)
VK9-Nauru Island	(28)	ZD8-Ascension Island	(36)
VK9-Norfolk Island	(32)	ZD9-Tristan da Cunha and Gough Island	(38)
VK9-Papua Territory	(28)	ZE-St. Rhodesia	(38)
VK9-Ter. of New Guin.	(28)	ZK1-Cook Island	(32)
VO-See VE.		ZK2-Niue	(32)
VP1-British Honduras	(7)	ZL-New Zealand	(32)
VP2-Leeward Island	(8)	ZM6-British Samoa	(32)
VP2-Windward Island	(8, 9)	ZM7-Tokelau (Union)	(31)
VP3-British Guiana	(9)	ZP-Pangaea	(11)
VP4-Trinidad and Tobago	(9)	ZS1, 2, 4, 5, 6-Union of Sth. Africa	(38)
VP5-Cayman Island	(8)	ZS2-Marion Island	(38)
VP5-Jamaica	(8)	ZS3-St. West Africa	(38)
VP5-Turks, Caicos Is.	(8)	ZS7-Swaziland	(38)
VP6-Barbados	(8)	ZS8-Basutoland	(38)
VP7-Bahama Island	(8)	ZS9-Bechuanaland	(38)
VP8-See CE7Z, LU-Z, VK0.		3A-Monaco	(14)
VP8-Falkland Islands	(13)	3V8-Tunisia	(33)
VP8-South Georgia	(13)	3W8-Cambodia	(26)
VP8-St. Orkney Is.	(13)	4S7-Ceylon	(22)
VP8-St. Sandwich Is.	(13)	4W1-Yemen	(21)
VP8-St. Neill Island	(13)	4X4-Israel	(20)
VP9-Bermuda Island	(5)	5A-Libya	(34)
VQ1-Zanzibar	(37)	5S4-Saar	(15)
VQ2-Nth. Rhodesia	(36)	5S4-Aldabra Island	(38)
VQ3-Tanganyika Ter.	(37)	5S4-Bhutan	(22)
VQ4-Kenya	(37)	5S4-Comoro Island	(39)
VQ5-Uganda	(37)	5S4-Fridtjof Nansen Land	(40)
VQ6-Brit. Somaliland	(37)	5S4-Kermadec Island	(32)
VQ8-Chagos Island	(39)	5S4-Mongolia	(23)
VQ8-Mauritius	(39)	5S4-Nepal	(22)
VQ9-Seychelles	(39)	5S4-Tromelin Island	(37)
VR2-Fiji Islands	(32)	5S4-Wrangell Island	(19)

DX

Frank T. Hine, VK2QL
30 Abbottsford Road,
Homebush, N.S.W.

I have not been able to follow the bands personally this month due to being very QRL, but any time I did get a listen things did not seem very impressive for working DX and this has been confirmed by others. After 4th December, one of the milestones that have been round my neck and gradually getting heavier, will no longer exist, and I may be able to concentrate a little more on watching the bands. I was touch and go whether I could make this issue with Notes, but I felt duty bound to those who had sent in copy, so here we are but very briefly. The QTHs sent in this month.

NEWS AND NOTES

VQ8AS has been active and his low power is getting out very well. He can be heard from about 1130z. He is not interested in the "goodday-goodbye" contact but will carry on lengthy conversations, so don't get on the black list by trying to bust him on a QSO with continually calling on the other station's frequency.

SV0WQs/Crete QSLs may be sent via the Grecian Bureau. Quite a few are held there for him, but at the time of writing these notes, his location is not known. Apparently no cards have as yet been sent out by SV0WQ.

VP2VG. If you still make a QSL from here, try W4CG, C/o C.A.A., Fort Meyers, Fla. (2AIR)

F2BR is ex-FB8BR (3CX)

PYOCV has been active from Trinidad Is. during Dec. (3CX)

Danny Well is expected to be afloat again soon as FOBAN/MM and first port of call is the Virgin Is. and then into the Pacific again. (3CX)

For the V.h.f. DXers, keep a watch on 50 Mc. during January from 0200z to 0700z. The m.u.f. indicates good possibilities.

JT1AA is an operator from OK1KAA. He will be in his present location for one year. The station is xtal controlled on 7010, 7030.8, 14004, 14061, 14093 Kc. Power is 150w. to an antenna between two 100 ft. masts. Is normally active on 14061 Kc. between 1000z-1800z and will not answer calls on his own frequency. The foregoing from Amaterske Radio.

ACTIVITIES

1 Mc. 2AIR: W. KRAKA, 2AMB: KH6AVX (phone). 3QL: ZE4JM. BERS195: G4NP, HB-MJ, D22OC. JALG, KRAKA, SP8HU, UA1DZ, UA3FA, UA6R, ZE4JM, ZL5AA (1130z). Don Granley: JAINI.

1 Mc. C.W.: 6AB: EABF, YOSFT, CR-6CV, OX3DL, ITIAGA, VP8AO, LZIKSZ, UR1KAA, 2AGH: UR1KAA, UR1KBF, ZM7AC, FURAD, UQ2KAE, 2AIR: SWAG, HZCL, VQ4KRL, VQ8AM, VQ8AS, HL2AE, CT-3AB, UL7BH, VP0Y, XZ2TH, HC1HL, XW6AE, UN1AE, IS1E, VS8AD, XW6AE, 2AMB: XZ2TH, VS8AD, HC1HL, E8AP, CT3AB, JALG, HZCL, SV0WQ, VRET, FJ2ME, VP1NM, UJ8AG, UN1AE, VQ8AC.

* Call signs and prefixes worked.
x - zero time - G.M.T.

3QL: VQ2SW, OX3DL, HH3CL, XZ2TH, UR-2AB, SV0WQ, UL7BH, CT3AB, VQ8AS, UN-1AN, SV0WQ, CR6AC, VRET, 20W: UA6CD, KC4US, UR1KAA, VP8DI, HL2AM, HC-3IC, HL3KZ, XEIMP, HARVZ, JT1AA, CM4D, SZR: LU2EL, LU2ED, LUSNA, CN1FW, CT3AB, UR1KAE, XZ2TH, 3CX: HK3UC, FBRD, UR1KAA, CT3AB, K5-6CEJ/K3E, XW6AE, HS1AE, UA0AKR (Dickson Is.), XK1AT, OX3DL, UR1KAE, KG1BB, W4CB/K5A, UQ8CA, CP1CJ, FP1AS, FP1AP, JT1AA, 4DO: UA*, UL-7BH, VR2AP, KR6QW, KC4US, ZLSAA, ILV, ZE7JR, SPAC, and many Europeans. 6GM: CT1CB, UR1KAE, EUD, HL2AE, T1E2F, LZIKPC, OX3DL, XZ2TH, LA1ZF, BRK: ZC5CF, HL2AE, W1A-L309, UA*, ZM-6AS, CT3AB, KG1BB, E8AP, K8BAZ/20B, BERS195: CR6AC, E8AGW, EABF, EABE, FBZ2Z, HZ1AB, HS1BE, HC1HL, HZ1AC, HL2AM, JALG, KC4AE, MP1EBL, OD-5AV, OAAAP, QOVV, OX3MA, OX3DL, SV-0WR, SV0WQ, UQ2AC, VQ3UT, VS8AC, VS-8AD, VK1AT, ZE7JE, ZM6AS, SV8AU, SATH. Don Granley: CT1US, CNEQ, COMD, EASBA, FYTTF, FA, HZ1AC, HH3CL, KC4US, KM-5AX, 984CH. 14 Mc. Phone: 6AB: ZSH, ZSM1, ZS3BC, VP8AC, 2AMB: EAJE, VR2DA, VR3A, TG8AD, F8GZ, OAIK, HL2AM, ZS8AE, Don Granley: ZL5AF, KS8AX, BV1US, Barney Smith: ZE7JR, IS1E, FZCF, HK4OP, OQ8E, FURAD, FJ2AL. 21 Mc. C.W.: 6AB: KA5C, CR10AA, TP-5TF, SV8AB, S4BT, SV0WQ, 2AIR: 4X4BX, KPA4Z, KPA4F, 2AMB: ZB1DC, TSTF, UR1KAA, VS2ER, VS1AF, VR1BC, 3QL: HZ1AC, SV1AB, SR: Many Europeans plus FYTTC, S4BT, TSTF, CN1FW, ZP8AY, UC2AF, UR2AR, UA*, 28 Mc: 3QL: ZK1BS, UA0OM.

QTHS OF INTEREST

ET2KY-Via ET2US, U.S. Army Tape Relay Station, Asmara.
YK1AT-Via OK1MR.
FB8CD-Via ZS6ANE, 996 Mondeor, Johannesburg (SWO).
IS1I-Box 90, Mogadiscio (SWO).
FR7CZ-Froussin, Reunion Is. (SWO).
CT3AB-Rua de Santa Maria 261, Funchal. No SVI calls are listed in my book, but all cards for Greece can go by Box 564, Athens.

QSLs RECEIVED

2AIR: ZC4IP, ZL5AA, FJ2ME, FYTTF, W6UO/K5B, SL7CH, SV0WQ, VQ2V, 2AMB: P2JME, ZL5AA, 3QL: ZL5AA, UA0OM, 20W: ZC3AL, 3CX: CE0AB, SRK: ZC3AL, BERS-195: 984DG, ET2NG, LU4AN, DL3CI/LX, ST2NG, JALG, UN1AE, VQ8P. Well boys I must wind it up for this month. If I receive any late reports, they will appear in next month's issue. By the way, I hope you did not believe the misprint in last month's notes in the ZL5AA par. 50 Mc. of course should have read 5 Mc. My thanks to ZEG for QSP of 6AB, 2AGH, 2AIR, 2AMB, 20W. We welcome ZZR and 3CX, 4DO, 5GW, and SRK who I hope to see in January. W1A-L309, BERS195, Don Granley and Barney Smith.

SILENT KEY

It is with deep regret that we record the passing of:-

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Mc.	E. AUSTRALIA	—	W. EUROPE	S.R.	Mc.
0	2	4	6	8	10 12 14 16 18 20 22 24
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E. AUSTRALIA	—	N.W. U.S.A.			
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E. AUSTRALIA	—	N.E. U.S.A.	S.R.		
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H

Frank P. O'Dwyer, VK3OF
190 Thomas Street,
Hampton, Vic.

Forewell the trans-equatorial scatter until the next equinox and with it the regular contacting of JA stations by our northern Hams. But there is one thing that is sure to be missing as well—there is always the chance that conditions may suit that medium of propagation, so during daylight hours keep careful watch for any faint signals that may come. Not that you are warning the few UK signals there have been popping in from north, south, east and west. Bob 4NG says that trans-equatorial scatter works up to a timetable, and that the scattering and ending of the same time each night, whereas F layer reflection may happen any time during daylight hours, signals accompanied by the characteristic hiss that is only heard at the stations. One morning 4NG heard an American voice calling CQ DX on the band, but call remained unidentified. So there are more eggs in the basket than you think. The UK stations in the first KH6 contact for the season? They were not infrequent in the past. KH6UL is setting the pace and giving us something to strive for. The last transmission on 50.225 Mc, as listed last month,

November opened with a quiet week for Interstate contacts, then satisfied the gang with some lively openings all around the country. By the end of the month, the gang was on every evening of the third week with several east west openings (Nov. 18, 22) which brought the first international contacts for the season. The VK3/VK4 path was good for the VK3/VK4 western district. All Melbourne stations were inactive, apparently recovering from the field day held on Nov. 17. The ZLs were heard on Nov. 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 1960. Ham but by several enthusiastic listeners who have monitored the band for many years. On Nov. 22 the VK5/VK3 path opened, this time with a very good VK5/VK3 path. The advantage of the conditions and over a period of 20 minutes quite a few good contacts were made. One feature of the VK5/VK3 opening during the last week of the year, which the band remained open, contacts taking place up to 2300 on several nights. The week finished with a very good band good for VK3/VK4 on Nov. 23.

The last week of the month let the gang build up their energy for the commencement of the Ross Hull Contest, Dec. 1. Wed. 2 produced a highlight when VK4NG contacted VK6BE, good signals each way, so putting VK6 back into the picture. Same night, Bob was putting a patchy S8 sig into Melb., but no contacts were made. As a prelude to the Ross Hull Contest and an indication of what to expect, the last day of the month brought VK4 well into the picture down south, the band being open from 0900 until 1530.

The lament of the month came from Bill 4WD (Brisbane) at 2337 on Nov. 21 when he complained that he had lost his voice in the morning while working on K2 3, 7; there were so many signals on the band he didn't know whom to work next. Probably the most pleasing aspect of the operations is the most pleasing number of stations on the band in all States, new call signs belonging to both full and limited licences appearing frequently. Rarely does CQ go unanswered in M.L., and the time appears to be passing in the Divisions also. And what a kick the Z call chaps are getting out of the Interstate DX, truly satisfying their desire for full tickets

Vern 4LK, Charters Towers, 350 miles northwest of 4NG Rockhampton, passes comment on the openings. He has had a lean time since the JA run finished, relieved by a good QSO with Sig 3CL Nagambie. S8 both ways, yet Vern could not hear the Melb. gang, active 80 miles to the south. Frequently 4NG puts S9 plus signals into Melb., while Vern a bit to the north just cannot do it. His most consistent openings are to VK2

Another station to look for is located at Macquarie Island on 59.190 Mc. Transmission shall probably commence during January '58, possibly before.

The Contest Committee and F.E. are to be commended for the way in which they have revived the 50 Mc. band by altering the Ross

Hull Contest rules. Old voices are there in force now that the "local contact, one point" rule is no longer valid. And who is going to be the first Z call to receive the W.A.S. certificate? Divisional rivalry is keen.

NEW SOUTH WALES

Meeting: The V.h.f. and T.v. Group held its monthly meeting at Gore Hill Technical College on Friday, 6th December, at 8 p.m. After a very smart disposal of formal business, this well attended meeting was treated to a colour film screening of the whaling industry at Byron Bay, N.S.W. We are deeply indebted to Mr. D. P. Shute for bringing and showing us this film.

A lecture by Professor Winch then followed. The Professor, suitably attired in cap and gown, delivered a most learned discourse on the "Infinite Current Aerial," otherwise known as "20A's Two-Bob Spout." Bob demonstrated mathematically that he had been able to achieve a gain of over 2,000 with this type of aerial. He was congratulated on his achievement by Jim 2PM and a vote of thanks was carried by acclamation.

Among the visitors present were Bruce 2ZCM (formerly of Coff's Harbour), Stuart 2ZDF (Newcastle), Ron 2ZBG and Bill 2ZAC.

Monthly Day Fixture was held on Sunday, 10th November, and was a mobile Fox Hunt. It is some time since the Group has had this type of event in daytime and as apparently no success is to be registered, the hunters found were not present to participate. The fox (Dick 22CF) started from Baulkham Hills and followed a route that led through Kenthurst, Maroota, Sackville, Windsor, and Blackwood, and then finally to the Baulkham Hills. The fox was intercepted by John 2ANF, four times during the day. John, with Bob 20AA as co-pilot, thus became the outright winner of the event with a score of nine points. Second was Jim 2ZBW who scored one point, and third was the runner up, the only other hunter participating was John 22AV.

Monthly Light Fox Hunt was held on 27th November. This event for the first time in some months reverted to a straight out hidden x hunt. The fox on this occasion was Bob 20A who was well hidden at Seaforth. First in was Jim 2ZBD who made it in 53 minutes. In second place was Phil 2ZBB with the 2ANF/HO combination in third. Other bounds present were 2ZCF, 2ZAV, 2AWZ.---

Scramble: A surprise scramble, held after the usual Sunday evening broadcast, resulted in a clear win for John 2ZAV. Many stations tied for second place.

During the Month of November the 2 mx band has been wide open to Newcastle on several occasions, resulting in 2ZDL and 2ZDF working many Sydney stations. Wal 2MZ has been having narrow escapes from bush fires in the Blue Mountains. Neville 2DR (Blayne) has been out of action since his beam was blown down. Jim 2ZBD has now become 2PM-2ER.

VICTORIA

Group Meeting.—The meeting on Nov. 20 was attended by 20 members. After meeting at the rooms at 8 p.m., the Group moved off to the Radio Maintenance Section of T.A.A. at Essendon. There, Ron 3AHJ gave interesting talks on various bits of modern airborne equipment on display. At the conclusion of the display, the hosts provided coffee for the gang, all of whom had enjoyed themselves thoroughly.

Field Day.—The first field day was reasonably attended despite the overcast weather. Stations in the field included 3VF at the Strezelecks, 3ZAI Mt. Ridley, 3ZBP/ZDG at Pretty Sally, 3ZAT Arthur's Pond, 3ZUB Dick's Pond, 3ZAC at the Donkey and 3ZCN in the Pentland Hills. All stations except 3ZAT worked 2 mx (David's gear broke down) and 3ZAT and 3ZAI worked 6 mx, whilst 3VF and 3ZAI had 288 Mc. gear. Results are not to hand at the time of writing. The next field day is on 26th of this month (tentatively), with the National Field Day, so be in it and kill two birds with one stone.

Band Jetings.—Frank 3ZDW, situated near the top of "3BQ mountain" has an overpowering signal on 283 Mc. now. Ken 3AFJ is fairly active on both 1 and 6 mx, whilst Max 3ATK is having troubles with his 7193 ocx. Gordon 3ZEI at East Burwood appears to be the newest station on 2 mx. Welcome, Gordon.

Interstate stations have been coming through on 6 mx frequently enough to keep the gang on their toes. It is heartening to see some of the old-timers coming back on 6: 3PG, 3BW, 3AHL and 3SF are back, whilst newcomers include 3ZDB, 3ZDJ and 3ZCG (at Moe). I hear that some fine openings have taken place to the west on 2 mx, but I have no details—perhaps next month when I have more time.

The notes are fairly short this month because I have had exams for the past three weeks and at the time of writing have another fortnight of the things to endure. Therefore I have had neither time nor energy to devote to "mail reading" or note scrounging. However, if I am able, I will try to do better next month.—3ZAQ.

SOUTH AUSTRALIA

The main item this month is the activity on 6 mx where just about everyone who has (or had) an 8 meg. rock, is back on the job feeding into various arrays ranging from 4 el. Tiltons to 40 mx folded dipoles. Some of the frequencies heard being: 5MT 50.2 and v.f.o., 5ZF 50.3, 5KC 50.28, 5RO 50.1 and 51. 5ZAW 50.6, 5MTK 50.5, 5QR 50.004, 5ZBA 51, 5XV 52.02, with 5AX, 5ZAX, both active on the band, but frequencies not noted as yet.

Col 5RO using about 40w. into an 829B, John 5ZBA also has an 829B in the final, Neil 5ZAW uses his new 4 el. beam and the 829 final; were you surprised Neil when the indicator gave upward modulation? George 5GB has a converter covering the full range 50 to 60 megs., that will stand looking at. He is a bit of a v.h.f. urger, tried to talk me into 50 megs "in five minutes", anyway, will get to it some day, George. Ray 5ZBM is building 6 mx gear, so will soon be heard there.

All of these boys have been doing great things when the break-throughs happen, and working all VK areas in turn. In fact one night they were doing so good that they had to go to channel 1 on a t.x. No, it's not mine, but belongs to a keen type here who is building one and was at my QTH for a test. Rather an expensive v.h.f. converter, but it worked as such and when on channel 1 with the g.i.o. signal it gave the best results. It has brought all the sigs on 6 in at great strength. In fact Col 5RO and Keith 5MT, who were picking off VK2s and VK4s at the time, were followed with great ease, as also were the 5s and 4s. I want to give the credit, however, to an idea to get on 6 quickly, or at least the rx side of it.

There is a very keen v.h.f. man in Bill Simister who lives at Sealcliff, he is another v. rx constructor and has had a fair measure of success. More important to us though, is that he has been keeping a very complete log of "conditions" for v.h.f. propagation, weather maps, temperatures, humidity, band noises, etc., etc., with the idea of developing some pattern to enable prediction to be made from day to day.

There is a chance Norm, spot him out with an application form and you are bound to collect, and as far as v.h.f. types are concerned, seek him out for information on this subject, for he is anxious to meet up with the gang.

Two metres has shown a burst of activity, too, in that more sigs are heard here anyway, and is probably due to the cross-band duplex made possible by the use of 50 megs. The Ross Hull Contest will no doubt bring them all out of hiding now, so all old acquaintances

Hughie 3BC heard occasionally with good strength, working Keith 5MT, but conditions not at peak by any means as yet, so keep plugging my friend. Ern 5EN heard trying to make it through to Adelaide again, but not very strong. Try 6 mx Ern, and you will be in it again.

288 Mc. has been quiet, most of those boys have been trying for their c.w. and neglecting the bands as a result, but that didn't hold up the activity of 5KY, 5JK, 5ZDY, 5XA and

SZDX.
SZDE (ex **SZDF** by the way) went portable some time back at Salisbury, and worked **SZBX** at \$7 each way. George used a 16 el. beam and a pair of **SZBR**. Brian **SZBN** is now **SJR**, and Keith **SZBR**, Rick **SZDX**, and Ron **SZDY** have all passed the hurdle and awaiting two-letter calls, with Brian **SZBX** awaiting news that he made it also. Congrats fellows, and best of luck to the many others going through the same hoop at present.

Rex 5KY is experimenting with a 5-tube superhet on 288 Mc., hope it works out fellow; if it does, what about an article for the magazine to pass on your ideas and what you found out?—SEF.

WESTERN AUSTRALIA

The V.h.f. Group's Fox Hunt took place on Sat. 9th Nov., starting from King's Park as usual; 6th Nov. was in charge. Role took great pains to make everything a success, but unfortunately gremlins crept in, much to Role's disgust. The tx was some distance away from the power supplies and mod. etc., on the river bank, in fact there was a stretch of water between, with power lines, etc., running

(Continued on Page 16)

Y L

Phyl Moncur
235 Union Road
Ascot Vale, Vic.

MEG AND CON.

Meg Ohm and Con Denser are two good old radio gals with terribly clever husbands—Hams, you know. They meet regularly for QSO (Quinces, Sausages and Oranges) and this is how it goes—

"Hello Con, how are you and how's your OM's new rig going?"

"Oh, fine, Meg, just fine, and what's new with you?"

"Well Con, my OM's still trying to get his old one working, he works on 30 metres, you know."

"Gosh, Meg, that must have cost him a packet, 30 metres, but what on earth does he want all that many for. I counted up seven meters in my OM's shack and I'm quite sure he doesn't use half of those even. But do you know what, the other day he went and bought a new one. An 'ome meter, he calls it. Terrible careless he is, always droppin' 'is Hatties."

"Well Con, the next thing my OM is going to build is some gear for 7 megahertz. Your OM told him he ought to go on 576, but if he goes I'll leave him, that's what I'll do. Heavens, 576 megahertz! Just imagine the noise, why we'd have all the neighbours complaining."

"Meg, I want to ask you something personal. Do you know who this fellow CQ is? My OMs always calling him, but I never hear him come back. My belief is he's a female because everytime I creep up and listen at the shack door, my OM stops calling CQ pretty pronto and just goes over to some other OM. He knows very well I don't like him talking to women. I've put my foot down on that ever since the time I heard him telling an American

YL that his resistance was low and that he had too much impedance—meaning me, I suppose."

"No Con, I don't like my OM talking to women either. When we first got married he told me that radio was a safe hobby for a man and that I'd have a lot to be thankful for because I'd always know where my husband was. But I don't know, the other night I heard him asking a YL if she'd change her frequency. Now what do you make of that?"

"Well, I won't know Meg, but it doesn't sound too good, does it? My OMs always talking about changing his frequency; now if only it was his underclothes or his socks, I'd be all for it."

"Then Con, the next thing is, he asks her for her QTH and on top of that he says he will give her a call on phone tomorrow evening, so apparently she's given him her telephone number, too."

"Well Meg, I wouldn't stand for it if I were you. I'd tell him off."

"But Con he doesn't take any notice of me, everytime I criticise him he just puts tone on and turns it up as loud as it will go so he can't hear anything I'm saying."

"Yes Meg, I know how it is, my OM is always making the most terrible noises with his wretched wireless sets too. And I say to him: 'What on earth are you doing in there?' And he answers back: 'Just tickling the cat's whisker, Con.' And you know darn well by the awful screech that he's trodden on the poor cat's tail."

"Well what I really object to Con, is all the money he keeps spending on his wireless and wouldn't think of buying me a thing. And the latest is some talk about motor-boating. Well, if he thinks he's going to buy a motor boat as well as all that wireless junk, he's got another think coming."

"Well, what do you think my OM says to me, Meg, when I asked him to buy me a new dress. He says: 'Con, you don't need a new dress, you've got plenty of dresses and besides you'd look beautiful to me in a strip of insulation tape!'"

"There's one thing, Con, I must say for my OM, and that is that he did come good and build me a rotary clothes line. Real modern one it is with four lines for the clothes, but the only trouble is he's gone and put it up on the roof on top of a 40 ft. pole and how

on earth he imagines I'm going to climb up that pole with a basket full of washing under one arm and the bag of pegs under the other, well, I just can't imagine."

"The latest at our place, Meg, is a BC348 receiver, but the OM's having trouble with the oscillator."

"Goodness gracious Con, you amaze me, I never dreamt they would have had receivers back in 348 BC. Well Con, I'll have to go now as I am expecting the OM home soon. He went to town today to buy an AR88. Well, 88 means love and kisses, and AR means end of message, and I'm so excited I can hardly wait for him to pull the big switch tonight."

V H F

(Continued from Page 15)

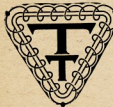
through the water and to make things easier, dry batteries were used for the tx filaments. This is where the gremlin crept in, they started to take the knock and in his checking, changed crystals—forgot to change back; was off the air for 20 mins., causing the hounds much worrying. Never mind, Frank 6CC's super rig, which is not sensitive to frequency change, brought him in first with 6HK second and 6ZAV third. Much fun was had by all.

Don 6HK and his YXL got hitched on 23rd Nov. Leaving for their honeymoon, they were chased by 6TR and 6WJ and many rounds of the Caseway circuit were made before the boys let them go. The best wishes of the Group go to Pat and Don in their venture.

The meeting on Monday 25th at D.C.A. eventually finished up at Rolo 6BO's QTH—the cause? Nobody thought about picking up the keys—"wouldn't it?" Wally Coxon, 6AG, an old-timer, was a welcome visitor and gave a very interesting talk on Tools and Their Uses in Amateur Radio, also photo printing of circuits, etc., from books. Most of the younger members of the Group, especially, were very pleased with the tips and short cuts that Wally gave. Once again, Wally, many thanks.

50 Me.—No break throughs to the time of writing.

144 Mc.: 6BO and 6WG, Albany, working on phone, 250 miles, most mornings.—6ZAV.



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NOTES

FEDERAL

A WORD OF THANKS

As the Old Year closes and the New Year opens it is again necessary to give some thought to those members who have given time and energy to the job of keeping the Wireless Institute of Australia functioning.

It so happens that many of these duties are of an unspectacular nature and because they do not attract the spotlight of publicity rather tend to be forgotten.

On behalf of members Federal Executive would like to say "thank you" to all who have helped.

THOSE "ET" CALLS

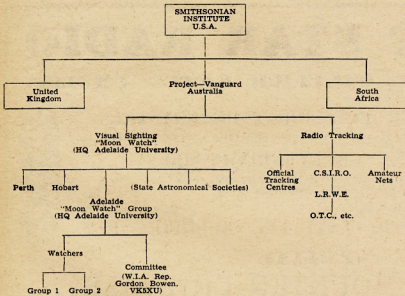
It is interesting to note that the Honorary Secretary of the Irish Radio Transmitters has stated that calls of the series EI have never been issued to Radio Amateurs in Eire. These calls are reserved for the use of commercial stations.

THE I.G.Y. SET-UP

Following on the successful efforts by Amateurs in reporting the recent satellites, some interest has been evinced in the set-up of the reporting organisation.

Here is shown a small portion of a section of interest to Amateurs, and it shows how reports find their way to the Smithsonian Institute.

The Wireless Institute is most fortunate in that it has as its representative on the "Moon-watch" Committee none other than the Federal Councillor for VKS, Gordon Buwen. Those who heard Gordon handling reports on VK6WI during the recent satellite alerts will realise what a splendid job he is doing for the Institute.



FEDERAL QSL BUREAU

The following changes in the W QSL Bureau set-up are notified: W2 and K2—North Jersey DX Association, Box 55, Arlington, New Jersey. W3 and K3—Julian Ober, W9DSO, 2901 Gordon Drive, Flossmoor, Illinois.

In a QSL to BERS195, Frank Robb, G16TK, mentioned that his eyesight is failing rapidly. Frank has operated in over 50 countries in the past 30 years and must be well known to scores of VK c.w. men. It is understood that

Frank's affliction, which has already claimed the sight of the left eye, is the result of an accident. He intends to continue operating on phone on all DX bands and possibly may continue c.w. as well.

Bill Storer, VK2EG, who is acting as QSL Manager for Chas Hawker, VK0AB reports that all cards received to mid-November have been answered.

The fall off in QSL traffic through this Bureau during October proved, as expected, only a temporary respite, for cards soared again in November. Despite the implications, writer wishes all good hunting in 1958.

—Ray Jones, VK3RJ, Manager.

NEW SOUTH WALES

The November meeting of the New South Wales Division held at Science House, Gloucester Street, Sydney, on Friday evening the 22nd had an attendance of eighty members and visitors.

An excellent lecture was given by Mr. Neville Williams on Techniques in Television Receiver Construction. Mr. Williams covered the design of t.v. antennae indicating that some of the finer points used in construction of antennae for Amateur bands had to be discarded when designing a t.v. antenna. This was necessary to enable multi-band coverage to be obtained.

Points on the construction of the tuner, i.f. strips, the various oscillator circuits, and a.c. circuits were also covered, the choice of components for the various stages was discussed. Comparisons were made between the various disposal type 5 and 6 inch tubes available and many useful hints were given on the use of such tubes. To demonstrate the different types of components a very large range was on display and included a 21 inch receiver which gave very good results under very poor receiving conditions.

This was a very enlightening lecture, both for those who have already built a t.v. receiver and those who are contemplating such a project.

Charlie 2AWQ moved the vote of thanks on member's behalf and was carried by acclamation from these present.

Several matters of business were discussed including the purchasing of a number of the latest text books for the Divisional Library. These have now been procured and will be

CAN YOU HELP?

Federal Executive requires the services of a Federal Secretary during the time that Doug, Bowie, VK3DU, is abroad.

The position is a temporary one and will cover a period of about six months from Easter 1958.

If you live in Melbourne and can help with this interesting job would you phone Fed. Sec., Doug, Bowie, at WF 5504 or write Box 2611W, G.P.O., Melbourne, C.I.

record of all stations and regional groups ready by the New Year.

A report was given by Arthur 2AJA on the progress made with the erection of the poles at Dural, four 60 ft. masts have been erected and soon the antennae will be raised.

The Chairman, 2APQ, gave details of a 25 k.v.a. emergency power supply which has been procured for WVI at Dural.

The meeting closed at 11 p.m.

A very successful Field Day was held on 17th Nov. at Gosford. For the past few years joint W.I. and R.I. meetings and R.I. Branch members has been held at Woy Woy. The change to Gosford renewed interest in this day. The efforts of the newly formed Central Coast section in organising the day's activities was very commendable. 88 members registered and the total attendance of families and friends brought the number to over 230.

The two main events each carried a 6146 and cup as first prize. The 7 Mc. Scramble was won by Bill 2XT of Newcastle, and the 144 Mc. Hidden Transmitter Hunt was won by Dick 2ZCP, of Sydney. Great interest was displayed in the disposal gear, all of which was acquired by those present. It is understood that plans are already being made for next year's event. Those who did not attend missed one of the best days held. The Divisional Broadcast was originated at the location using 2ARG's 2 mx mobile gear for a relay to 3RU who re-transmitted on 14.5 Mc. Unfortunately, a very high noise level prevented all reports being taken.

Talking of relays, experiments carried out at WVI and doing a portion of the weekly broadcast via a 2 mx link have been very successful and when all the problems have been cleared, it is cleared, that many innovations will be included in the broadcasts and another step in the W.I.C.E.N. organisation completed.

We were very pleased to be host to K6DK at Dural and give members the opportunity to hear Jerry during our news broadcast. If

CONTEST CALENDAR

Compiled by W.I.A. Fed. Contest Com.

★

ROSS HULL MEMORIAL—

Bands: 50-54, 55-60, 144-148, 228-236 Mc.
Date: 1st December to 31st January.
Rules: As published in the Australian 2 Mc. Scoring on 50-54 Mc. as for 50-60 Mc. Special Award: Greatest distance over 3,900 miles.

B.E.R.U. (C.w. Contest)—

Date: 25th January to 26th January, '58.
Duration: 0001 G.M.T., 25th, to 2359 G.M.T., 26th.

Rules: As for 1957.
* Amendment: Sections: High Power, Low Power (25 watts limit); Receiving Section.

NATIONAL FIELD DAY—

Date: 26th January.
Rules: See "A.R." December, 1957.

W.A.E.D.C.—

Dates: C.w.—3rd Jan.-6th Jan., 1958.
Phone—4th April-6th April, 1958.
Times: 1800 to 2400 G.M.T.
Duration: 1958.
Freq.: (a) C.w.—3.5, 7, 14, 21, and 28 Mc.
(b) Phone—14, 21 and 28 Mc.
Rules: Apply P.F.C.

available to members through the library service; watch for details in your Bulletin.

Bob ARG, the Divisional W.I.C.E.N. Co-ordinator gave a resume of the replies received from members interested in the W.I.C.E.N. organisation and passed around for members to see an official C.D.O. map on which were marked the locations of stations who have signified their willingness to participate in the scheme. If you have any ideas or queries on W.I.C.E.N. Bob will be very pleased to hear from you, as he hopes to have a complete

BOOKS OF INTEREST TO ALL RADIO AND T.V. ENTHUSIASTS

- ★ "HOW TO MAKE GOOD TAPE RECORDINGS," by C. J. Le Bel 19/3, 9d. postage.
- ★ "HIGH FIDELITY"—Gernsback Library 15/6, 9d. postage
- ★ "HI-FI HANDBOOK," by Wm. F. Boyce £1/12/0, 1/- postage
- ★ "HOW TO INSTALL AND SERVICE INTERCOMMUNICATION SYSTEMS
by Jack Darr £1/14/3, 1/- postage
- ★ "BEAM ANTENNA HANDBOOK," by Wm. I. Orr £1/9/0, 9d. postage
- ★ "RIBBONS OF SOUND," by Karl A. Barleben £1/5/9, 9d. postage
- ★ "UNDERSTANDING HI-FI CIRCUITS," by Norman H. Crowhurst .. £1/11/3, 1/- postage

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at any time you know of visitors to Sydney, let them know they will be very welcome at 2WJ. Dural to meet members over the weekly broadcast.

Although the formation of a listeners' section has been put before you, very little interest has been shown. However it is felt that there are a number who would be interested but have not heard of such a group or know how to join. Those interested to see the idea and advise those interested to contact the Secretary, Box 174 G.P.O.

Now that Xmas is over, we trust you all enjoyed the best of good things, and trust that 1958 will be all that you wish for.

The 8th Annual Hamfest commencing at the monthly meeting on 24th January and continuing on the afternoon and evening of 25th and Sunday 26th.

Country members intending to attend are requested to advise the Secretary should they require accommodation booked.

The Saturday afternoon and evening rendezvous will be at 2WJ Station, Quarry Rd., Dural.

VICTORIA

The December meeting of the Victorian Division, being family night, was easily the best attended meeting for the year. Nearly every station was present, and the evening was held to an attendance of about 120. A very fine muster for President Fred (3YS) and his willing helpers who put on a really enjoyable night for all.

The meeting started off with the usual preliminaries, including the admission of new members as listed below, and then turned to dispose of the vital business of the night. This included a very appropriate selection of films, a visit by Father Christmas (3CW) who brought toys for the harmonicas and a supper which left nothing to be desired.

Fred did a very commendable job in arranging the programme and he carried out his duties of host to the true spirit of the occasion. Credit is also due to the team who made this night possible by the donation of food, toys, and time, not far at all cost. And out those who assisted our President in making the night the success that it was: were: Mrs. Moncur, Mrs. Dennis, Mrs. Lancaster, Mrs. Higginbotham, Mrs. Clark, Ken Millbourne, Keith Roget, Maurie Waters, Gordon Dennis, Len Moncur and George Robertson. No doubt there were others who were hiding their light behind a bushel and to these I offer a vote of thanks and an apology for missing them in my search.

The only visitor for the evening was 2AYE and we hope he enjoyed his stay with us.

You wouldn't read about it! Secretary Jay (3JL) fell off a stationary train and broke his left elbow. That's his story anyway, and he had his damaged arm along to the meeting to prove it. Don't know the repair time, Jay, but it's not too long. Just let us hear from the DX while you are home, that's all.

Would anyone like the job of Federal Secretary while Doug 3DU takes a six months' trip overseas next year. If so make your wishes known as soon as possible. Doug assures us that the duties will not be onerous while he is gone. Must be saving up those things, whatever they are, for his return. Here's hoping he is also going to tell us of his experiences whilst overseas at a future lecture, is he not, Doug?

We were very sorry to learn that our Administrative Secretary, Mrs. May, was unable to attend the Christmas meeting due to a

death in the family. Our deepest sympathy, Mrs. May, to you and yours in your time of sorrow.

Full members admitted to the Institute at the meeting were Messrs. I. deG. Macmillan (3ZD), R. Sand and R. S. Sanderson, C. J. Buckley and D. J. Goss.

Don't forget. There is no general meeting of the Division on 30th, so the first meeting for the new year will be on the first Wednesday in February which is the 5th. The matter of the future night is not yet known but will be announced. K. Barnes notes to arrive at the meeting and over the Sunday morning broadcasts. These broadcasts will be given each Sunday morning commencing at 10.0 hours, right throughout the holidays, so listen out for the news and views of the Division at these times.

The South Western Zone has given notice of its next Convention to be held at Warrnambool in March of the new year. Those intending to go will need to make bookings before the middle of February. Listen to the Sunday morning broadcasts for further details.

SOUTH WESTERN ZONE

The zone is very active on the hook-up each Thursday night. There has been very good attendances and the main topic is preparing for the next hamfest. The Melbourne club Warrnambool on 22nd and 23rd March, 1958. We do hope to see a good turn up at this gathering. There will be v.h.f. activity, also x hunt, etc. etc. I hope some of the Melbourne club will turn up, also chaps from all zones. There will be a prize for the chap who travels the longest distance to be at the gathering.

Please note! All who intend coming to the Convention must send a £1 deposit for accommodation and also 10/- for the dinner on Saturday night. This must be forwarded before the second week in February, 1958, as after this date no responsibility will be accepted for bookings. These bookings are to be sent to Bill Wines, 48 Crawley St., Warrnambool, who is the organiser.

A Happy New Year to all from South Western zone members.

EASTERN ZONE

Five cars went down to Colac for the State Convention. Ian 3AY was the winner. 3ZCG worked some of the stations on 2 m whilst mobile. Everyone enjoyed themselves and David 3DL and YL were donated a piece of surplus gear. Ken 3LW was the winner of the surplus gear. Jack 3AJK was the winner of the mobile 2 m hidden tx hunt. We put a fox hunt on 40 m and had 20 cars. Doug 3ZC and the fox and used stacked halos. Len 3ZCN and 3ZCG were the winners. The Eastern Zone has a fox hunt on 40 m. I have phased away, Ian, George and Geoff had a fox hunt on 40 m and display and several boys climbed it so that Len 3LN could make a movie record.

On our way home, one of the boys was looked for having a rum on the car. Claimed to be an obstruction to vision, so all fox hunts in the zone are cancelled until further notice pending the decision of the other law of the State Police. The Secretary of the W.I.A. is now attending to this matter.

George 3ZCG and Geoff travelled to the top of Mt. Macedon last night on 40 m and had 29 contacts. They had difficulty in getting down the mountain side as they got snowed in overnight.

Ian 3AJK is now back on 40 and 80 m using his portable gear, until the high power equipment is re-built. We welcome two new zone members on the air, Allan 3ZCP at Hastings, and Stewart 3ZDD at Pakenham.

Hope everyone of the zone had a very enjoyable Christmas, and I wish you all a bright and prosperous new year.

WESTERN ZONE

We were sorry that we did not have one of our members at the State Convention which was held in Colac recently, however, we are pleased that Leigh 3IL of the South Western Zone, could represent us, so thanks a lot Leigh.

Activity in the zone seems to be increasing. We are expecting some new stations on the air soon. Another two stations are building new or re-modelling their old rigs. Jim 3AJ of Hoptown, is on the air again after some months of inactivity caused by the fire which destroyed his house and contents a few months ago. He intends to build a high powered rig around a Gelo 50 v.o. unit, but at present they are unobtainable, so he is wondering if any of you chaps have a spare one or two he want to dispose of. He would swap his mobile rig for one if anybody is willing. Jim will

always be pleased to see any Hams who happen to be in his locality. My 3ATR has regular skeys with Chas 4AB, of Davis, and a couple of other stations expect to be contacting Chas during the next month or so.

MOORABBIN AND DISTRICT RADIO CLUB

The annual general meeting was held on 15th November with an attendance of 20. The President, Stan Easton, reviewed the events of the past year, and the annual elections followed, with the following elected as office-bearers for 1958: President, Stan 3ZE; Vice-President, Jack 3ZEF; Sec. and Publicity Officer, Laurie 3CN; Treasurer, Ken 3ACS; Asst. Sec. and Hon. Auditor, Ian 3AKC; Transmitting Officer, Frank 3OF. Committee members: Ed 3EM and Arthur 3AWO.

At the general meeting which followed the annual meeting, the Certificate Officer, Bill Alder, announced the awarding of the award of the Club Certificate of honorary membership to the first German station to qualify, DL1IB. Don't forget to let DX stations know they need only five contacts with member stations to win this handsome certificate. VK stations need fourteen contacts. So go to it, chaps!

Hardly recently at natter night complaining about 20 being too few to be worth trying to re-ectrify his beam at the present QTH, Bob found that, whether he shortened or lengthened the elements, the resonance was always less. Just like a cat chasing its tail. Here's hoping it loads well now, Bob.

Don't forget, if you live anywhere near Moorabbin, District Radio Club, on the first and third Fridays of each month at the Library, Moorabbin Town Hall. There is to be no natter night in January, and our next meeting will be on 17th January, a general meeting and members' re-union. Visiting Hams are always made very welcome. So come along—we guarantee you will enjoy yourself!

QUEENSLAND

MARYBOROUGH

4DJ now has an electrolyte "750" and is hearing many more signals. Graham's quads for 15 and 10 metres were put on a 22 ft. steel pipe, erected and christened. Trimming operations are now in progress.

Archie 4CB is still active on 10 m and beamforming poor conditions. Received a TF QSL with four I.R.C. coupons! How lucky could he be?

A four element 4GZU is now on the tower at 4BG and so far has been tried on 15 and 20 metres. It has done well on both bands. Better than the previous element on 20 m. A small front-to-back ratio on 20 m is the only thing needing improvement.

4AI is due to come to life again. He has a converter going on 15 m and should soon be heard there.

TOWNVILLE

Two new members for next year turned up at the final club meeting in 1957, held at the residence of 4BX. This augurs well for the

Wireless Institute of Australia

Victorian Division

A.O.C.P. CLASS

commences

MONDAY, 3rd FEB, 1958

Theory is held on Monday evenings, and Morse and Regulations on Thursday evenings from 8 to 10 p.m.

Persons desirous of being enrolled should communicate with—Secretary W.I.A., Victorian Division, 191 Queen Street, Melbourne (Phone: MY 1087) or the Class Manager on either of the above evenings.

W.I.A. N.S.W. DIVISION

8th ANNUAL

HAMFEST

will be held on

25th JANUARY, 1958

at

V K 2 V I

QUARRY ROAD, DURAL

New Year. The three who were faced the barrier at the last exam, have been patiently awaiting the results. One of them, a notice of failure by air letter and the other two still keeping their fingers crossed. Better luck next time, Charlie. As the local R.I. examiners' Association have been transferred, it was decided to have a social get-together amongst the boys for the purpose of welcoming the new R.I. The date of 11th Dec. was decided on and all present were to get in touch with other members in 144 Mc. means to be present. Sorry to see you go, Alec, our loss is Hobart's gain.

The things over the past month have been very interesting, but the results have not lived up to its reputation. Allan APS was on this band working into Europe for the first time, and was ready to go into a beam, awaiting location of windmill tower. Bob 4FF has his tower up, lucky enough to get his tower free for the taking away. Interest in 144 Mc. seems to have waned again because the old timers just cannot be interested to give it a go and help the Z boys along. What a pity!

Again no word from the Coalfields, must be busy down there. Most other towns and districts show up on 7 Mc. at least for a rag.

Colin 4CE almost finished a t.v. rx and hopes to see and hear Channel 2 from way down south. Vern watching the short skip on 50 Mc. from the Coast, and the Aussies have off the air at 7 a.m. and leaves channel free. Andy also planning new all-band rig. John BUKK has been making a good record on the air. Vern 4LK interested in 50 and logging literally hundreds of Japs and goes into more detail than QSL cards. QSL cards hope. Alex 4MA, at Mt. Garnett, heard from time to time either in early mornings or late afternoons on 40 mc. in charge of local exam. The Coast sign has been receiving new serials and getting better results. Norm 8NT not heard since he went to Rabaul. His mate, who has portable gear, has been receiving and Redcliffs. Bob 4TK still playing around with his all-band final and getting on to 820 kHz. Dave 4BF at Albury, gave me the back-up with his presence and hopes to get on more in the new year. Believe one 4RW fell by the wayside recently and omitted to hand the current Nick 4VT, was recently operating air/mobile. Vice 4BJ, at Beautiful Bundy, wants to build a rig from an Italian circuit and requires someone to help out with language difficulty.

As these are the first notes to appear for 1958, I wish each and everyone a good year of DXing. 73 Bob.

SOUTH AUSTRALIA

Our last get-together was a clear demonstration that the main body of members handle Amateur Radio work as a hobby and just as a hobby. It was a very good thing, thinking and the placing of our interesting hobby in its right place, from which arises the correct outlook and behaviour claimed as our motto.

The lecture of the evening was an absorbing one, and was presented by the speaker, SDH, with the mechanical help of Norm Colman, and was on Diesel Traction. Dave has the background and knowledge fitting him to put to talk to the kind, for his employment takes him right into the thick of diesel locomotives and railway gear right at the engine end. He has been asked to give answers to the many questions hurled at him by the would-be engine drivers in the audience.

An exceptionally well attended meeting, with a good sprinkling of visiting guests, attention to the whole proceedings and were not behind in seeking further information on the technical details of the machinery described. Dave gave a brief history of the evolution of railway traction leading to the economical diesels and explained in detail the modern diesel-electric loco and the advantages and the more simple (!!) multiple rail cars now so common on country and suburban lines.

The comparison of costs of running these new jobs compared with even the latest steam driven locos was an eye opener to most and some of the boys were working on the locos the S.A.R. would need at the annual saving per mile would also wipe out the

national debt and make travel free. We must put that to Dave some day and get his reaction.

Sufficient to say is that with an improvement of availability of over 400 per cent., and with the local average operational range of 1,000 miles between fuelling, it is easy to see where these economies arise, which is apart from the fuel per hour saving, least of all.

Very detailed slides were shown, some with dimensional outline and others showing the various stages of manufacture, of each of the classes of locos, and the use made with the modern passenger trains that for this State supply our answer to the electric trains used in the more populous areas.

Many thanks Dave for an interesting and instructive lecture, which as Keith 5KH said when moving the vote of thanks, was well received at question time and gave a gratifying to the programme committee for organising the evening.

The remainder of the evening was given over to general business, QSL card distribution, providing a smoko between times, new members (9 off) were accepted, and Jim 5JK gave a report on progress of W.I.C.E.N. and practice work.

Brian 5CA called prospective class members together to discuss the arrangements to arrange their forthcoming programme, which boiled down to theory on Tuesday nights at 7.30 p.m. in 9 p.m. under the capable guidance of John 5L, and practical work on 20 p.m. with Bruce 5OR at the helm. A good start was noted on their first class night with the exception of a few who were late, who was the chap talking to Norm and requesting an entry form? Looked to me like Doc. Surely he doesn't want to learn c.w. work!

Did you know John 5KX's lawn mover has been upset? Well, it has, because first of all it is not a law as previously reported, c.w. coe, and a 4-tooth, not 2. Furthermore, we are informed that the lawn does not require special attention.

A little bird, or was it the horse's mouth, tells me Brian 5CA is retiring from Secretaryship at the end of this financial year (Feb. 28 or 29) due to continuing illness, and his status, or should it be said assuming that status. Whatever it is, Brian will be doing just what we all wish, and that is, to be of course with him all the best as Secretary to the new duo.

The W.I.C.E.N. boys had another get-together to thrash out details of procedure on message handling, given by Jim 5FO and Jim 5JK, whilst John 5KX went through the operational set-up of the 122 sets with particular emphasis on netting, a very interesting evening with some of the boys throwing in some ideas on increasing the number of nets. The evening ended up with arranging another test programme that will have been held prior to publication of these notes.

An adjourned meeting was necessary to complete the ratification of items put through the last Federal Conference, so you can see there has been a busy time for all interested in the Division of Vic.

Our new town Elizabeth had its second birthday recently, and amongst the many colourful and active staff, was a very good one, one manned by John 5GL, 5HA, 5JM and some willing helpers, with a mass of gear collected from all over the State, and in many Radio aids in extending goodwill. Some interesting contacts were made and the attendance to view the proceedings were good. Hot weather was the only thing that was a bit of a gear in the open, and on the operators, made the going a bit tough for a while, but it was noted that all the boys were in the job. One was distinctly cold by the look of relief John displayed when checking his grid view. See Hensens, 610/P, 4 Perth, W.A., paid VK3 visit recently whilst on his return journey from a recent Australia trip, and looked one of the boys over, nice to see you Lee. Some Sunday recently heard 5JK calling SMD on 80 mc from O'Halloran Hill. No answer from him, but he was heard on 80 mc, moving closer until he did make it—guess how close—yes, at the big barred gate. Try a SAE pre-amplifier, they are good.

On a recent Sunday morning when 7 Mc. short skip was poor, was able from here (Gawler) to make the city on 10, so crank up your headphones you city slickers and let's keep in touch.

It's not known how many of you heard this, but on a recent Saturday afternoon, when on 40 mc heard a very strong modulated carrier playing the A.B.C. programme on 7080 Kc. and simultaneously another one with music on 7100 Kc. The music was the switching off his carrier at the end of the item to cover the announcer and switching on

again when the next item started. Then, just to make the game harder, he zero beat his carrier with anyone who called CQ, just made a mess of the band for the whole afternoon. Maybe we could organise a bit and have these clever boys there is enough trouble on that band without some smarty deliberately fouling it up. Who has some ideas on this subject?

Finally, the picnic again. The venue has been advised already, the committee are anxious that it be well attended, and have made necessary arrangements to look after you and all the harmonics, so roll along and make a day of it. If you are doubtful on the details, drop me a line, or call me, or relay and they will put you right. Get some bowling practice in and see if the phone men can do it again.

— . . . —

TASMANIA

NORTH WESTERN ZONE

I trust you have all had a Happy Christmas in the full meaning of the words, and that the XYL gave you the piece of pudding with the 21st not 15th I AM in the area.

Have been relieving Leon 7JP at Queenstown for most of December. Leon is in the process of making a new down, so 7JP will not be on the air for some time.

As mentioned last month, Myles McGinnis, on King Island, only had his morse to do for his suit tickets. Myles this now received the call sign of 7MF and has been adding to the QRM on 40 mc with his No. 11 set. Even worked a W on c.w.

Excuse me that Ken Brown has been frequenting the auction sale in Burnie, he obtained an old 150 Ma. power supply for about 2 lb. Just as well had forgotten about the sale Ken, or I might have run up a few dB.

Field Day in Ulverstone very successful. Sid 7SP did a good job by hiding the tent close to Dennis 7DR's place which didn't seem to help Dennis because he was last to find it. First home was Jim 7JU arrived there apparently had that many accessories there was no room for the kitchen sink. Even a protector on the detector, I believe.

All the best to the coming year, and to all our associates—keep trying.

HAMADS

1/- per line, minimum 3/-.

Advertisements under this heading may only be accepted from Institute Members who desire to dispose of equipment which is their own personal property. Copy must be received by 8th of the month, and remittance must accompany advertisement. Calculation of cost is based on an average of six words a line. Dealers' advertisements not accepted in this column.

FOR SALE or Exchange 2 mx gear:
A. & R. Mod. Trans., 75w., £5. 10s. Transceiver, good order, £4. Pr. 809s, new, £1/10/0. 6v. Vibrator P.S., 300v. 150 Ma., relay controlled, £5. R. Fisher, 758a Glenhuthly Rd., Glenhuthly, Vic. Phone UL 2428.

SELL: Edgystone S750 with S Meter, £100. Zenith Freq. Meter with power supply, £30. I. Lamont, C/o W.I.A., 191 Queen St., Melbourne, C.I.

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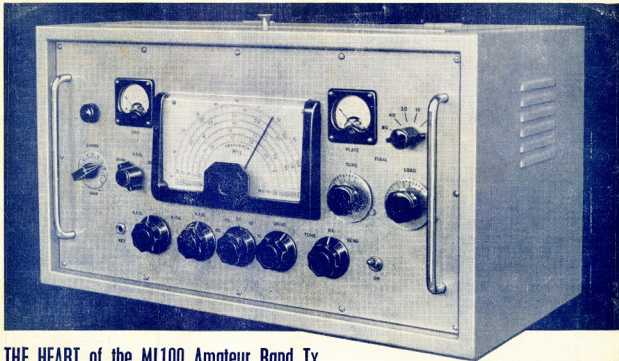
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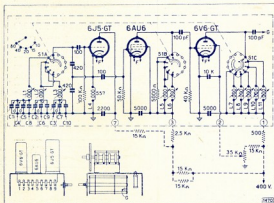
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